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AUTHOR Thompson, Bruce; And Others
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ABSTRACT

The original "Bayley Scales of Infant Development" (BSID) (Bayley 1969) have been among the most popular measures of performance and aptitude of infants. In the present study the reliability and construct validity of mental and motor scores on the revised Bayley Scales of Infant Development-II (BSID-II) were investigated. A national sample of 100 children aged 2 to 42 months was used to provide data that were analyzed with second-order factor analysis. The distribution of first-order trace suggests that probably too few first-order factors have been extracted in previous research with the Bayley measures. The findings suggest that the BSID-II assesses multiple aspects of infant behavior. At the second-order level, the mental and motor scores might still emerge as discrete constructs. Results, however, are inconsistent, with discernible mental and motor dimensions in some age groups and not others. It seems that more than two second-order factors must be extracted to fully represent BSID-II score variance. Appendix A presents 16 tables of item difficulty and description data. Appendix B presents 48 tables of reliability analyses. The text contains 34 tables of analysis findings. (Contains 25 references.) (SLD)

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The Validity of Mental and Motor Scores from the New Bayley Scales of Infant Development-II: A Second-Order Factor Analysis

Bruce Thompson

Texas A&M University 77843-4225
and
Baylor College of Medicine

John D. Wasserman James S. Gyurke Kathleen Matula

Jane H. Mitchell Blaine Carr

Psychological Corporation

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ABSTRACT

The original *Bayley Scales of Infant Development* (BSID) (Bayley, 1969) have been among the most popular measures of performance and aptitude of infants. In the present study we investigated the reliability and the construct validity of mental and motor scores on the revised *Bayley Scales of Infant Development-II*, the BSID-II (Bayley, 1993). We employed national samples of children ranging in age from 2 to 42 months, and a variety of factor analytic methods.

The original *Bayley Scales of Infant Development* (BSID) (Bayley, 1969) have been among the most popular measures of infant and child cognitive development. The initial publication of the BSID prompted a host of investigations regarding the characteristics of intelligence of infants ranging in age from roughly 1 to 42 months. Two parts of the original BSID--the mental scale and the motor scales--have been the primary focus of previous research efforts. Items on these two scales are scored "0" = incorrect and "1" = correct.

Unlike the mental and the motor scales, a third part of the measure--the Behavior Rating Scale (formerly labelled the Infant Behavior Record or IRB)--is not a right-wrong measure. This third scale, the Behavior Rating Scale, has undergone considerably less clinical and experimental use. As noted by Matheny (1980, p. 1157) with respect to the Infant Behavior Record scale, the scale is "considered by Bayley [and others] to provide useful information about infants' developmental status, but it has not received nearly as much attention" as the more thoroughly researched mental and motor scales. Because this third scale differs from the mental and the motor scales of the BSID in its format, the Behavior Rating Scale was not evaluated as part of the present study. Investigations of the BSID-II Behavior Rating Scale have been reported elsewhere (cf. Wasserman, Matula & Thompson, 1993).

Efforts to understand cognitive abilities and behavior in infants is important to understanding development more generally, and studies of development may ultimately have important

implications for the ways we educate children. The revised Scales, the BSID-II, have recently been released (Bayley, 1993), and the new BSID-II will doubtless spark much research and attendant insight and controversy. The present study was conducted to explore the reliability and the construct validity of scores from the mental and the motor scales of the new BSID-II.

Our study was grounded on the philosophical premises that the business of science is formulating *generalizable* insight, and that no one study, taken singly, establishes the basis for such insight. As Neale and Liebert (1986, p. 290) observed:

> No one study, however shrewdly designed and carefully executed, can provide convincing support for a causal hypothesis or theoretical statement... Too many possible (if not plausible) confounds, limitations on generality, and alternative interpretations can be offered for any one observation. Moreover, each of the basic methods of research (experimental, correlational, and case study) and techniques of comparison (within- or between-subjects) has intrinsic limitations. How, then, does social science theory advance through research? The answer is, by collecting a diverse body of evidence about any major theoretical proposition.

In the context of the primary analytic methods that we employed--factor analyses--Gorsuch (1983, p. 201) made a related observation

that, "Factors that will appear under a wide variety of conditions are obviously more desirable than factors that appear only under specialized conditions", e.g., only when certain samples or certain factor extraction or rotation methods are used.

Given our premises, we investigated the factor structure underlying BSID-II mental and motor scales utilizing (a) national samples of subjects, (b) 16 different age groups of subjects, ranging from 2 to 42 months of age, and (c) both *second-order* factor analyses and several factor rotation strategies. Different tnough overlapping items are used at each of these ages.

Factor Analytic Research with the Original BSID Scales

The Bayley Scales of Infant Development-II (Bayley, 1993) originated in work dating back to Nancy Bayley's arrival in Berkeley at the Institute of Child Welfare in 1928. She then began a longitudinal study of 63 infants that ultimately became the impetus for the standardization of these scales. Relative to the long history of the measure, however, efforts to explore the factor structure underlying BSID scores have been limited.

Early efforts in this genre included studies by Hofstaetter (1954), Stott and Ball (1963), and McCall, Eichorn and Hogarty (1977). Findings from these earlier studies tended to suggest that different factor structures may emerge at different age levels, as a developmental dynamic. McCall et al. (1977) have suggested that empirically derived structures tend to correspond with those that might be anticipated within a Piagetian theoretical framework.

In 1967, Kohen-Raz conducted an important study involving 405

Israeli babies aged 1 to 27 months. He identified five scales that met his scaling criteria: Eye-Hand, Manipulation, Object-Relation, Imitation-Comprehension, and Vocalization-Social Contact-Active Vocabulary.

Lasky, Tyson, Rosenfeld, Priest, Krasinski, Heartwell and Gant (1983) administered the BSID to 187 "high risk" (i.e., low birth weight or required ventilator assistance) and 85 control infants. The researchers subjected a final item pool of 23 items to separate principal components analyses across the two groups and extracted five factors in both groups. They reported high congruence on the first principal component, which was the primary focus of their analysis, across these two groups.

Similarly, Barclay and McWay (1985) used principal components analysis with varimax rotation to explore the structure underlying the data from 207 "disadvantaged" infants. They isolated 4 and 6 factors across two groups of subjects. In both groups a gross psychomotor factor emerged as a dominant factor. They also a "trend toward increasing differentiation of mental abilities as a function of maturation and experience" (p. 714).

Lewis, Jaskir and Enright (1986) investigated the factor structure underlying Bayley items using data from 118 subjects measured longitudinally at ages 3, 12, 24 and 36 months. They extracted 3 or 4 factors in their analyses. They also reported what they characterized as a second-order factor solution for three age groups, and isolated two second-order factors in each of these analyses. However, they did <u>not</u> relate the second-order factors

back to the original items, as is recommended for reasonable interpretation of hierarchical factor analytic results (Gorsuch, 1983, p. 245). The researchers concluded that "the items of the Bayley do not seem to form *either* a strong coherent principle [sic] component *or* a coherent set of factors" (p. 351, emphasis in original).

Method

Sample

Our subjects were 100 infants at each of 16 different ages. Our data were nationally sampled. Table 1 summarizes the demographic characteristics for the sample of 1,600 children who provided the data for our analyses.

INSERT TABLE 1 ABOUT HERE.

Results

Our study investigated the research question, what is the *second-order* factor structure underlying responses to BSID-II mental and motor scales across the 16 age groups in our samples? Many researchers acknowledge the prominent role that factor analysis can play in efforts to establish construct validity. For example, Nunnally (1978, p. 111) noted that, historically, "construct validity has been spoken of as [both] 'trait validity' and 'factorial validity.'"

Similarly, Gorsuch (1983, p. 350) noted that, "A prime use of factor analysis has been in the development of both the operational constructs for an area and the operational representatives for the

theoretical constructs." In short, "factor analysis is intimately involved with questions of validity.... Factor analysis is at the heart of the measurement of psychological constructs" (Nunnally, 1978, pp. 112-113). We employed principal components analyses for all factor extractions.

Analysts differ quite heatedly over the utility of principal components as compared to common or principal factor analysis. For example, an entire special issue on this controversy was recently published in *Multivariate Behavioral Research*. The difference between the two approaches involves the entries used on the diagonal of the correlation matrix that is analyzed--principal components analysis uses ones on the diagonal while common factor analysis uses estimates of reliability, usually estimated through an iterative process.

The two methods yield increasingly more equivalent results as either (a) the factored variables are more reliable or (b) the number of variables being factored is increased. Snook and Gorsuch (1989, p. 149) explain this second point, noting that "As the number of variables decreases, the ratio of diagonal to off-diagonal elements also decreases, and therefore the value of the communality has an increasing effect on the analysis." For example, with 10 variables the 10 diagonal entries in the correlation matrix represent 10% (10 / 100) of the 100 entries in the matrix, but with 100 variables the diagonal entries represent only 1% (100 / 10,000) of the 10,000 matrix entries. Gorsuch (1983) suggests that with 30 or more variables the differences

between solutions from the two methods are likely to be small and lead to similar interpretations.

With respect to *second-order* factor analysis, Kerlinger (1984) noted that, "while ordinary factor analysis is probably well understood, second-order factor analysis, a vitally important part of the analysis, seems not to be widely known and understood" (p. xivv). Example applications of second-order factor analysis have been reported by Kerlinger (1984), Thompson and Borrello (1986), Thompson and Miller (1981), and by Wasserman, Matula and Thompson (1993).

Gorsuch (1983) emphasizes that the extraction of correlated factors implies that second-order factors should be extracted. He noted, "Rotating obliquely in factor analysis implies that the factors do overlap and that there are, therefore, broader areas of generality than just a primary factor. Implicit in all oblique rotations are higher-order factors. It is recommended that these be extracted and examined..." (p. 255).

Thompson (1990, p. 575) explains second-order analysis:

> Many researchers are familiar with the extraction of principal components from either a variance-covariance matrix or a correlation matrix. However, the factors extracted from such matrices can be rotated obliquely such that the rotated factors themselves are correlated. This interfactor matrix can then, in turn, also be subjected to factor analysis. These 'higher order' factors would be

termed second-order factors.

However, it is important not to try to interpret these second-order factors without first relating them back to the observed variables themselves. Interpreting second-order factors only with reference to the first-order factors has been likened to interpreting shadows (second-order factors) made by other shadows (first-order factors) caused by real objects (the actual variables).

Even some very sophisticated researchers, e.g., Lewis et al. (1986) in their BSID study, incorrectly attempt to interpret the second-order factors using the first-order factors (Thompson, 1985). As Gorsuch (1983) argued,

> Interpretations of the second-order factors would need to be based upon the interpretations of the first-order factors that are, in turn, based upon the interpretations of the variables... To avoid basing interpretations upon interpretations, the relationships of the original variables to each level of the higher-order factors are determined. (p. 245)

Gorsuch (1983, p. 247) suggested that one way to avoid "interpretations of interpretations" is to postmultiply the first-order factor pattern matrix times the orthogonally rotated second-order factor pattern matrix. However, if rotation is used to facilitate interpretation of other structures, it also seems plausible to rotate the product matrix itself to the varimax

criterion.

We recognized at the outset that differences in the shapes of variables' distributions will attenuate the entries in the matrix of bivariate correlation coefficients that is subjected to factor analysis (Dolenz, 1992). Therefore, in the present study we calculated item difficulty (so-called P values) and dispersion and shape statistics, as reported in Appendix A (Appendix A also presents the items used for each age group). We deemed most of the distribution shapes to be reasonably homogeneous, but clearly some of these differences always impact the relationships among dichotomously-scored achievement items.

We also recognized that score reliability can attenuate correlation coefficients (Dolenz, 1992), and that reliability is a characteristic of scores and not of tests (Thompson, 1994). Therefore, we investigated the reliability of our data. These analyses are reported in Appendix B.

For the purposes of our second-order factor analyses, we employed Guttman's (1954) criterion, and extracted all first-order factors with eigenvalues greater than 1.0. Table 2 presents the distribution of trace for all eigenvalues that were greater than 1.0, i.e., prior to rotation of the factors (Thompson, 1989). The number of first-order factors extracted in the 16 age groups ranged from 11 to 17. The Table 2 results indicate that a two-factor first-order structure would clearly be inappropriate for any of the 16 age cohorts in the present study.

INSERT TABLE 2 ABOUT HERE.

These first-order factors were rotated to the promax criterion, and the interfactor correlation matrix was analyzed and second-order factors were extracted and rotated to the varimax criterion. Here we extracted two second-order factors in each of our analyses, to allow the mental and the motor BSID-II scales to emerge as discrete entities at each age level.

First-order factors were then post-multiplied by the second-order factors, as recommended by Gorsuch (1983), and the product matrix was then rotated to the varimax criterion. These analyses were conducted with program SECONDOR (Thompson, 1990). Tables 3 through 18 present these results for the 16 age groups.

INSERT TABLES 3 THROUGH 18 ABOUT HERE.

There is another very intriguing way to interpret second-order factors that also avoids the interpretation of shadows of shadows of real objects. This is the solution proposed by Schmid and Leiman (1957), and explained by Gorsuch (1983, pp. 248-254). This solution "orthogonalizes" the two levels of analyses to each other and also allows interpretation of both levels of analysis in terms of the observed variables. Tables 19 through 34 present the Schmid-Leiman solutions, computed by program SECONDOR (Thompson, 1990), for the data from the children aged 2 to 42 months. It should be noted that the first two columns in Table 19, for example, are also equivalent to the unrotated product matrix that

Gorsuch (1983, p. 247) suggested could be interpreted without rotation.

INSERT TABLES 19 THROUGH 34 ABOUT HERE.

Discussion

Premises

Three precepts guided our interpretation of our results. First, *we recognized that item or variable means do not directly affect factor structure*. Factors extracted from product-moment correlation coefficients, as in the present study, are "scale-free", i.e., item means do not directly impact results. This is because product-moment correlation coefficients are themselves scale-free. For example, the correlation coefficients between all three pairs of variables (X and Y, X and Z, Y and Z) are all +1.0, even though the means of the variables differ:

	X	Y	Z
Jon	1	1	3
Jane	2	2	4
Mike	3	3	5
$\bar{X}$	2	2	4

This meant that differences in items means across age groups might not *necessarily* create structure differences across the groups. That is, the structures might differ because relationships among variables differed, but differences in means *per se* do not yield such differences. If the only differences across samples are developmental delays, then structures will be comparable across

groups.

Second, *we recognized that restriction of range or variability does attenuate product-moment correlation coefficients, which in turn impacts factor structure* (Dolenz, 1992). If subjects in a given sample generally score near the measurement "floor" or "ceiling", then the variability of scores on items will be smaller, and correlation coefficients among these scores will be attenuated. We expected some of these effects in our samples. For example, younger subjects tend to have more homogeneous scores because ability differences have had less time to create achievement gaps across individuals.

Third, *we recognized that factor order within solutions and factor scaling directions were unimportant*. With respect to *order*, a given construct may emerge as Factor I in one sample, Factor II in another, and Factor III in yet a third sample. Small variations in the distribution of factor variance or trace (Thompson, 1989) are not noteworthy; what counts is whether the construct is reasonably stable regardless of ordering across solutions.

Also, with respect to factor *scaling*, we noted that the direction in which a factor is scaled is generally arbitrary. For example, in one data set the variable "handsome" may have a structure coefficient on Factor I of +.9, while "ugly" has a structure coefficient of -.8. In a second sample the signs of the coefficients may be reversed. The construct still remains a measure of attractiveness. We can always legitimately "reflect" any factor by multiplying all the coefficients on the given factor

by -1. This is legitimate because in the social science we do not presume any meaningful difference between abstract constructs scaled in different directions. For example, an achievement test can be scores number of right answers correct, or numbers of wrong answers. Thus, we did not attend to factor scaling direction differences in our interpretation.

Interpretation

We wanted to analyze the data with second-order factor analysis, because various levels of analysis give different perspectives on data (Gorsuch, 1983, p. 240). As Thompson (1990, p. 579) explained, "The first-order analysis is a close-up view that focuses on the details of the valleys and the peaks in mountains. The second-order analysis is like looking at the mountains at a greater distance, and yields a potentially different perspective on the mountains as constituents of a range. Both perspectives may be useful in facilitating understanding of data."

The distribution of first-order trace reported in Table 2 suggests that *too few first-order factors have probably been extracted in previous research with the Bayley measures* (e.g., Lewis et al., 1986). This finding suggests that the BSID-II assesses multiple aspects of infant behavior, a view that led to the construction of several theoretically- and empirically-derived Facet Scores in standard BSID-II scoring. In any case, the mental and motor scales might still emerge as discrete constructs at a second-order level.

The varimax-rotated product matrices reported in Tables 3

through 18 allow the interpretation of second-order factors in reference to the BISD-II items. The results here are inconsistent. *Discernable mental and motor dimensions did emerge in some age groups* (i.e., ages 2, 3, 15, 18, 24, and 27). However, at other ages the two dimensions did not emerge as discrete constructs.

The Schmid and Leiman (1957) solutions presented in Tables 19 through 34 provided yet another way to view the data. These solutions present the *unrotated* product matrices (as against the varimax-rotated product matrices presented in Tables 3 through 18) as the first two columns, followed by the first-order factors *with all variance present in the second-order product matrices removed from these first-order matrices*. Thus, the residualized first-order factors show what's left of the first-order factors, given the presence of the second-order factors. If the second-order factors perfectly reproduce the variance of a first-order factor, the residualized first-order factor will have a trace of 0.0.

With respect to the interpretability of the two second-order factors as mental and motor dimensions, based on results in the first two columns of Tables 19 through 34, these dimensions were identified in the same age groups that the two dimensions were recognizable as regards the rotated product matrices reported in Tables 3 through 18. However, the most noteworthy results from the Schmid and Leiman (1957) solutions involves the trace left in the first-order factors after the residualization process is completed. As noted, when the second-order factors reproduce most of the variance in the inter-item correlation matrix, the trace for each

residualized first-order factor will approach zero. The trace for the residualized first-order factors reported in Tables 19 through 34 suggests that, *across the 16 age groups, two second-order dimensions leave considerable variance unreproduced.*

This result suggests that more than two second-order factors must be extracted to fully represent BSID-II score variance. Thus, even at the second-order level, scores do not collapse into only a two-dimensional structure.

Summary

In a practical context, it is important to be able to measure abilities and behaviors of very young children, so that we may be able to identify those who may need and benefit from early intervention. In a scientific context, it is important to develop theory about the nature and the dynamics of performance as regards even very young children. Of course, deriving meaningful measurement of very young children is a daunting task.

Considerable effort has been invested in exploring the constructs measured by the Bayley Scales of Infant Development (BSID) since their original development so long ago (Bayley, 1969). The release of revised scales, BSID-II (Bayley, 1993), may facilitate even greater insight regarding dynamics within young children. The present study focused on the mental and the motor scales from the BSID-II.

From a construct validity point of view, the question is whether these results are consistent with theoretical expectations. We thought that two dimensions might emerge as second-order

factors, and that previous research with the BSID may have failed to isolate two dimensions as an artifact of methodology. However, to the extent that we did not find two-dimensional second-order structures, we thought that we would obtain increasing complex structures with increasing age, as a developmental phenomenon.

We did find increasing structural complexity with age, as reported in Table 2. There tend to be more eigenvalues greater than one with age. However, this result is confounded somewhat by the fact that different numbers of BSID-II items are used at various ages, as noted throughout the tables.

It is interesting that the mental and motor dimensions did emerge at selected ages. However, it is clear that in the aggregate a more complex structure exists even at the second-order level.

Of course, no one study establishes the construct validity of scores from any measure. It will be important to replicate these results in other samples and across various analytic methods. The use of second-order factor analyses to isolate even more complex second-order structures is especially appealing. The Table 2 results indicate that the frequent use of first-order methods in this arena may not be particularly productive in isolating parsimonious structures.

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Table 1
Subject Demographic Characteristics
(n = 1,600)

	Race				Education			
Age	White	AfrAmer	Hispanic	Other	9-12 yrs	HS/GED	1-3 post	16+ yrs
2	69	14	15	2	20	37	24	19
3	70	15	14	1	19	36	24	21
4	68	12	13	7	17	36	28	19
5	78	11	10	1	18	32	26	24
6	70	15	9	6	19	35	26	20
8	72	13	12	3	14	39	26	21
10	68	17	11	4	17	38	25	20
12	72	12	11	5	15	37	27	21
15	70	14	9	7	21	33	26	20
18	70	15	11	4	15	33	27	25
21	69	15	13	3	17	36	26	21
24	68	16	10	6	16	39	26	19
27	70	18	10	2	15	36	27	22
30	67	17	12	4	15	39	27	19
36	69	18	9	4	13	40	26	21
42	67	19	13	1	13	40	25	22

Note. Exactly *half* the subjects at each age level were females.

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Table 2
Distribution of Trace Prior To Rotation

Age	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	Sum
2	7.07	3.89	2.71	2.18	1.79	1.62	1.62	1.44	1.37	1.25	1.15	1.08						27.2
3	7.16	4.02	2.47	2.01	1.91	1.67	1.58	1.47	1.32	1.26	1.24	1.01						27.2
4	8.93	4.37	2.54	1.83	1.68	1.62	1.47	1.41	1.37	1.28	1.21	1.11	1.10	1.02				30.9
5	10.94	3.52	2.26	1.92	1.69	1.53	1.47	1.43	1.30	1.19	1.14							28.4
6	7.34	3.22	3.67	3.38	1.91	2.76	1.72	1.46	1.50	1.90	1.56	1.94						32.4
8	10.10	3.95	3.02	2.32	2.09	1.77	1.54	1.37	1.29	1.16	1.07	1.02						30.7
10	5.88	3.16	2.18	1.98	1.70	1.56	1.52	1.48	1.27	1.19	1.17	1.14	1.10	1.05	1.01			27.4
12	8.56	4.09	3.10	2.21	2.15	1.72	1.57	1.44	1.40	1.34	1.26	1.16	1.02					31.0
15	6.47	4.12	2.13	2.02	1.85	1.82	1.60	1.52	1.40	1.34	1.27	1.20	1.14	1.03				28.9
18	10.88	3.98	3.70	2.26	1.92	1.78	1.70	1.59	1.53	1.40	1.27	1.20	1.16	1.10	1.02			36.5
21	9.88	3.31	2.87	2.55	2.03	1.75	1.55	1.51	1.44	1.33	1.28	1.19	1.14	1.10	1.06			34.0
24	12.00	3.67	3.52	2.80	2.22	1.95	1.81	1.68	1.59	1.42	1.39	1.31	1.27	1.14	1.11	1.06		40.0
27	12.10	4.19	2.76	2.28	1.96	1.82	1.78	1.54	1.46	1.44	1.38	1.28	1.20	1.17	1.04	1.01		38.4
30	7.79	2.76	2.33	2.13	2.04	1.95	1.66	1.62	1.53	1.41	1.37	1.27	1.19	1.16	1.12	1.02	1.01	33.4
36	9.17	2.92	2.77	2.30	1.96	1.86	1.76	1.69	1.53	1.49	1.44	1.29	1.26	1.22	1.11	1.04		34.8
42	10.04	3.06	2.53	2.17	2.01	1.78	1.71	1.59	1.48	1.39	1.37	1.29	1.25	1.16	1.11	1.03		35.0

Table 3
Varimax-Rotated Product Matrix for Age 2

Variable	I	II	h^2
1 MEN13	.419	-.184	.209
2 MEN14	.154	.251	.087
3 MEN15	.345	.078	.125
4 MEN16	.368	.133	.153
5 MEN17	.357	.195	.166
6 MEN18	.411	.298	.258
7 MEN19	.398	.038	.160
8 MEN20	.314	.299	.188
9 MEN21	-.076	.393	.160
10 MEN22	.032	.386	.150
11 MEN23	.613	-.061	.379
12 MEN24	.411	-.071	.174
13 MEN25	.440	.016	.194
14 MEN26	.331	.381	.254
15 MEN27	.455	.176	.238
16 MEN28	.450	.146	.224
17 MEN29	.439	.073	.198
18 MEN30	.741	.187	.584
19 MEN31	.715	.175	.541
20 MEN32	.446	-.072	.204
21 MEN33	.230	.197	.091
22 MEN34	.644	.411	.583
23 MEN35	.391	.216	.200
24 MEN36	.585	-.033	.343
25 MEN37	.649	.384	.569
26 MOT7	-.008	.418	.175
27 MOT8	-.064	.336	.117
28 MOT9	.207	.142	.063
29 MOT10	.086	.270	.081
30 MOT11	.062	.431	.190
31 MOT12	.204	-.010	.042
32 MOT13	.120	.454	.220
33 MOT14	.155	.305	.117
34 MOT15	.066	.591	.354
35 MOT16	.289	.441	.277
36 MOT17	-.083	.686	.478
37 MOT18	-.032	.671	.451
38 MOT19	.186	.443	.231
39 MOT20	.377	.277	.219
40 MOT21	.190	.470	.256
Trace	5.55	4.15	9.70

Table 4
Varimax-Rotated Product Matrix for Age 3

Variable	I	II	h^2
1 MEN20	.493	.174	.273
2 MEN21	.230	.341	.169
3 MEN22	.442	.254	.260
4 MEN23	.582	-.010	.339
5 MEN24	.569	-.050	.327
6 MEN25	.443	.053	.199
7 MEN26	.361	.034	.131
8 MEN27	.475	.042	.227
9 MEN28	.001	.629	.396
10 MEN29	.321	.261	.171
11 MEN30	.459	.299	.300
12 MEN31	.369	.340	.252
13 MEN32	.388	-.038	.152
14 MEN33	.311	.431	.283
15 MEN34	.300	.196	.128
16 MEN35	.223	.250	.112
17 MEN36	.211	.227	.096
18 MEN37	.365	.319	.235
19 MEN38	.496	-.036	.247
20 MEN39	.659	.267	.506
21 MEN40	.530	.302	.372
22 MOT11	-.033	.456	.209
23 MOT12	.200	-.020	.040
24 MOT13	-.326	.360	.236
25 MOT14	-.042	.452	.206
26 MOT15	.070	.325	.111
27 MOT16	.201	.406	.205
28 MOT17	.195	.532	.321
29 MOT18	.057	.478	.232
30 MOT19	.167	.516	.294
31 MOT20	.019	.589	.348
32 MOT21	.294	.230	.139
33 MOT22	.246	.509	.319
34 MOT23	-.114	.278	.090
35 MOT24	.131	.479	.247
36 MOT25	.050	.496	.249
37 MOT26	.146	.527	.300
38 MOT27	.089	.509	.267
39 MOT28	.315	.443	.296
40 MOT29	.100	.585	.353
Trace	4.26	5.37	9.64

Table 5
Varimax-Rotated Product Matrix for Age 4

Variable	I	II	h^2
1 MEN30	.184	.218	.081
2 MEN31	.290	.206	.126
3 MEN32	-.080	.236	.062
4 MEN33	.102	.209	.054
5 MEN34	.386	.208	.192
6 MEN35	.122	.225	.065
7 MEN36	.378	.290	.227
8 MEN37	-.047	.610	.374
9 MEN38	.385	.390	.301
10 MEN39	.311	.325	.202
11 MEN40	-.013	.747	.558
12 MEN41	.409	-.048	.169
13 MEN42	.143	.310	.117
14 MEN43	.291	.420	.261
15 MEN44	.138	.387	.168
16 MEN45	.576	.392	.485
17 MEN46	.472	.166	.250
18 MEN47	.323	.501	.355
19 MEN48	.569	.397	.482
20 MEN49	.268	.514	.336
21 MEN50	.286	.495	.326
22 MEN51	.357	.216	.174
23 MEN52	.268	.514	.336
24 MOT17	.224	.068	.055
25 MOT18	.141	.248	.082
26 MOT19	.233	.136	.073
27 MOT20	.112	.279	.090
28 MOT21	.224	.152	.073
29 MOT22	.559	-.042	.314
30 MOT23	.148	.159	.047
31 MOT24	.243	.318	.160
32 MOT25	.353	.304	.217
33 MOT26	.340	.175	.146
34 MOT27	.523	.164	.301
35 MOT28	.725	.049	.527
36 MOT29	.117	.354	.139
37 MOT30	.209	.224	.094
38 MOT31	.422	.403	.341
39 MOT32	.333	.272	.185
40 MOT33	.319	.341	.218
41 MOT34	.503	.144	.273
42 MOT35	.371	.387	.287
Trace	4.77	4.55	9.33

Table 6
Varimax-Rotated Product Matrix for Age 5

Variable	I	II	h^2
1 MEN42	.359	.189	.165
2 MEN43	.359	.284	.210
3 MEN44	.420	.342	.293
4 MEN45	.435	.340	.305
5 MEN46	.374	.271	.214
6 MEN47	.123	.271	.089
7 MEN48	.308	.319	.197
8 MEN49	.007	.557	.310
9 MEN50	-.037	.552	.306
10 MEN51	.328	.138	.127
11 MEN52	-.104	.372	.149
12 MEN53	.485	.362	.366
13 MEN54	.174	.395	.186
14 MEN55	.396	.153	.180
15 MEN56	.215	.404	.210
16 MEN57	.269	.684	.540
17 MEN58	.441	.174	.225
18 MEN59	.385	.747	.706
19 MEN60	.385	.747	.706
20 MEN61	.044	.564	.320
21 MEN62	.369	.685	.606
22 MEN63	.223	.359	.178
23 MEN64	.294	.548	.387
24 MEN65	.294	.548	.387
25 MEN66	.294	.548	.387
26 MOT25	.509	.011	.260
27 MOT26	.346	.187	.155
28 MOT27	.212	.057	.048
29 MOT28	.451	.225	.254
30 MOT29	.440	.157	.219
31 MOT30	.578	-.172	.363
32 MOT31	.515	.402	.427
33 MOT32	.359	.293	.215
34 MOT33	.466	.215	.264
35 MOT34	.273	.433	.262
36 MOT35	.462	.227	.265
37 MOT36	.698	.097	.496
38 MOT37	.364	-.124	.147
39 MOT38	.572	.337	.442
40 MOT39	.469	.290	.304
41 MOT40	.548	.384	.447
42 MOT41	.295	.449	.289
Trace	6.08	6.52	12.60

Table 7
Varimax-Rotated Product Matrix for Age 6

Variable	I	II	h^2
1 MEN49	.306	.168	.122
2 MEN50	.213	.323	.150
3 MEN51	.447	.181	.233
4 MEN52	.020	.527	.278
5 MEN53	.450	.229	.255
6 MEN54	.224	.565	.369
7 MEN55	.318	.443	.297
8 MEN56	.176	.213	.076
9 MEN57	.452	.389	.356
10 MEN58	.615	-.035	.379
11 MEN59	.515	.572	.593
12 MEN60	.010	.434	.188
13 MEN61	.412	.439	.363
14 MEN62	.550	.134	.320
15 MEN63	.436	.125	.206
16 MEN64	.607	.429	.552
17 MEN65	.607	.429	.552
18 MEN66	.610	.442	.567
19 MEN67	.062	.332	.114
20 MEN68	.607	.429	.552
21 MEN69	.642	.218	.460
22 MEN70	.671	.162	.477
23 MEN71	.503	.124	.269
24 MEN72	.579	.146	.356
25 MEN73	.434	.067	.193
26 MOT28	.416	.355	.299
27 MOT29	.123	.011	.015
28 MOT30	.328	.070	.113
29 MOT31	.322	.517	.371
30 MOT32	.515	.150	.288
31 MOT33	.361	.278	.208
32 MOT34	.475	.294	.313
33 MOT35	.419	.304	.269
34 MOT36	.340	.415	.288
35 MOT37	.310	.324	.201
36 MOT38	.259	.215	.113
37 MOT39	-.088	.467	.226
38 MOT40	.138	.475	.244
39 MOT41	.416	.194	.211
40 MOT42	.300	.462	.304
41 MOT43	.286	.187	.117
42 MOT44	.278	.195	.116
43 MOT45	.375	.215	.187
44 MOT46	.379	.265	.214
45 MOT47	.436	.370	.327
46 MOT48	.494	.077	.249
Trace	8.00	4.95	12.95

Table 8
Varimax-Rotated Product Matrix for Age 8

Variable	I	II	h^2
1 MEN59	.314	.203	.140
2 MEN60	.079	.375	.147
3 MEN61	.039	.314	.100
4 MEN62	-.131	.348	.138
5 MEN63	.316	.441	.294
6 MEN64	.325	.129	.123
7 MEN65	.147	.321	.124
8 MEN66	.426	.232	.235
9 MEN67	.180	.385	.181
10 MEN68	.371	.406	.302
11 MEN69	.446	.352	.323
12 MEN70	.179	.384	.179
13 MEN71	.506	.464	.472
14 MEN72	.515	-.001	.265
15 MEN73	.506	.464	.472
16 MEN74	.474	.365	.358
17 MEN75	.543	.364	.428
18 MEN76	.558	.220	.360
19 MEN77	.310	.250	.158
20 MEN78	.398	.089	.166
21 MEN79	.447	.105	.211
22 MEN80	.573	.322	.431
23 MEN81	.555	.384	.456
24 MEN82	.399	.016	.159
25 MOT42	.013	.296	.088
26 MOT43	.257	.268	.138
27 MOT44	-.013	.480	.230
28 MOT45	.052	.778	.608
29 MOT46	.286	.430	.266
30 MOT47	.422	.267	.250
31 MOT48	.321	.125	.118
32 MOT49	.277	.236	.132
33 MOT50	.376	-.071	.147
34 MOT51	.468	.046	.221
35 MOT52	.386	.547	.448
36 MOT53	.272	.366	.208
37 MOT54	.565	.187	.354
38 MOT55	.453	.334	.317
39 MOT56	.354	.154	.149
40 MOT57	.470	.035	.222
41 MOT58	.612	.001	.374
42 MOT59	.611	.241	.431
43 MOT60	.532	.146	.304
Trace	6.78	4.44	11.23

Table 9
Varimax-Rotated Product Matrix for Age 10

Variable	I	II	h^2
1 MEN64	.245	.189	.096
2 MEN65	.124	.314	.114
3 MEN66	-.061	.115	.017
4 MEN67	.030	.283	.081
5 MEN68	.291	.022	.085
6 MEN69	.283	-.094	.089
7 MEN70	.225	-.106	.062
8 MEN71	.395	.161	.182
9 MEN72	.371	.396	.295
10 MEN73	.275	.264	.145
11 MEN74	.132	.623	.406
12 MEN75	.259	.247	.128
13 MEN76	.207	.135	.061
14 MEN77	.254	.252	.128
15 MEN78	.140	.139	.039
16 MEN79	-.073	.485	.240
17 MEN80	.251	.189	.099
18 MEN81	.157	.321	.128
19 MEN82	-.018	.145	.021
20 MEN83	.119	.290	.098
21 MEN84	.190	.107	.048
22 MEN85	.200	-.097	.049
23 MEN86	.107	.663	.452
24 MEN87	.063	.295	.091
25 MOT51	.280	.116	.092
26 MOT52	.527	.181	.311
27 MOT53	.427	.189	.218
28 MOT54	.772	-.053	.599
29 MOT55	.664	.073	.447
30 MOT56	.004	.462	.213
31 MOT57	.085	.119	.021
32 MOT58	.408	.323	.271
33 MOT59	.399	.073	.164
34 MOT60	.669	.006	.447
35 MOT61	.453	.122	.220
36 MOT62	.343	.190	.154
37 MOT63	.352	.145	.144
38 MOT64	.317	.485	.336
Trace	3.98	2.81	6.79

Table 10
Varimax-Rotated Product Matrix for **Age 12**

Variable	I	II	h^2
1 MEN71	.425	-.118	.195
2 MEN72	.515	-.001	.265
3 MEN73	.409	.116	.181
4 MEN74	.444	.196	.235
5 MEN75	.378	.019	.143
6 MEN76	.357	.019	.128
7 MEN77	.590	.109	.360
8 MEN78	.252	.125	.079
9 MEN79	.590	.109	.360
10 MEN80	.392	-.017	.154
11 MEN81	.451	.066	.208
12 MEN82	.315	-.016	.099
13 MEN83	.245	.181	.093
14 MEN84	.463	.126	.230
15 MEN85	.147	.037	.023
16 MEN86	.706	.060	.501
17 MEN87	.295	.198	.126
18 MEN88	.281	.178	.110
19 MEN89	.475	.338	.339
20 MEN90	-.152	.116	.037
21 MEN91	.543	.104	.306
22 MEN92	.465	.083	.223
23 MEN93	.555	.358	.436
24 MEN94	.512	.307	.356
25 MEN95	.404	.257	.229
26 MEN96	.332	.145	.131
27 MEN97	.568	.338	.437
28 MEN98	.555	.358	.436
29 MEN99	.170	.362	.160
30 MEN100	.317	.254	.165
31 MOT58	.433	.008	.188
32 MOT59	.158	.364	.158
33 MOT60	.425	.119	.195
34 MOT61	.037	.357	.129
35 MOT62	.128	.454	.222
36 MOT63	-.039	.335	.114
37 MOT64	.495	.071	.250
38 MOT65	.109	.469	.232
39 MOT66	.159	.453	.231
40 MOT67	-.120	.771	.608
41 MOT68	.211	.451	.248
42 MOT69	.031	.592	.351
43 MOT70	.344	.143	.139
44 MOT71	-.112	.757	.585
45 MOT72	.208	.403	.206
Trace	6.55	4.05	10.60

Table 11
Varimax-Rotated Product Matrix for Age 15

Variable	I	II	h^2
1 MEN87	.183	.468	.253
2 MEN88	.155	.098	.034
3 MEN89	.267	.477	.299
4 MEN90	.334	.160	.137
5 MEN91	-.120	.332	.125
6 MEN92	.007	.482	.232
7 MEN93	.133	.314	.116
8 MEN94	.071	.279	.083
9 MEN95	.510	.215	.307
10 MEN96	-.019	.457	.209
11 MEN97	.116	.296	.101
12 MEN98	.134	.378	.161
13 MEN99	.080	.528	.285
14 MEN100	-.052	.559	.316
15 MEN101	.278	.466	.295
16 MEN102	-.056	.402	.165
17 MEN103	-.019	.377	.142
18 MEN104	.254	.266	.135
19 MEN105	.324	.281	.184
20 MEN106	.134	.656	.448
21 MEN107	-.004	.508	.258
22 MEN108	.202	.175	.072
23 MEN109	.024	.479	.230
24 MEN110	-.017	.415	.173
25 MEN111	-.015	.347	.121
26 MOT63	.388	.066	.155
27 MOT64	.299	.193	.127
28 MOT65	.494	-.152	.267
29 MOT66	.411	.265	.239
30 MOT67	.372	.352	.262
31 MOT68	.450	.110	.215
32 MOT69	.510	.145	.281
33 MOT70	.266	.416	.244
34 MOT71	.525	-.043	.277
35 MOT72	.523	-.133	.292
36 MOT73	.426	-.150	.204
37 MOT74	.216	.268	.119
38 MOT75	.671	-.257	.516
39 MOT76	.543	-.056	.298
40 MOT77	.509	.267	.330
41 MOT78	.485	.125	.251
42 MOT79	.264	-.028	.071
Trace	4.30	4.72	9.02

Table 12
Varimax-Rotated Product Matrix for Age 18

Variable		I	II	h^2
1	MEN97	.258	.339	.181
2	MEN98	.290	.251	.147
3	MEN99	.517	.054	.270
4	MEN100	.310	-.116	.110
5	MEN101	.310	-.116	.110
6	MEN102	.430	-.036	.186
7	MEN103	.145	.176	.052
8	MEN104	.430	-.036	.186
9	MEN105	.010	-.016	.000
10	MEN106	.625	-.079	.397
11	MEN107	.338	-.116	.127
12	MEN108	.569	.049	.326
13	MEN109	.641	.058	.414
14	MEN110	.566	.052	.323
15	MEN111	.766	.141	.607
16	MEN112	.291	.132	.102
17	MEN113	.721	-.085	.527
18	MEN114	.675	-.117	.469
19	MEN115	.378	.155	.166
20	MEN116	.314	.198	.138
21	MEN117	.556	.114	.322
22	MEN118	.750	.135	.581
23	MEN119	.170	.021	.029
24	MEN120	.766	.057	.591
25	MEN121	.670	.127	.465
26	MEN122	.744	-.001	.553
27	MEN123	.670	.127	.465
28	MEN124	.670	.127	.465
29	MEN125	.631	.096	.408
30	MEN126	.600	.127	.377
31	MEN127	.670	.127	.465
32	MOT66	.334	.463	.326
33	MOT67	-.058	.235	.059
34	MOT68	.211	-.117	.058
35	MOT69	.119	.394	.170
36	MOT70	-.065	.036	.006
37	MOT71	.053	.408	.169
38	MOT72	.030	.485	.236
39	MOT73	-.035	.602	.363
40	MOT74	.007	.274	.075
41	MOT75	-.051	.364	.135
42	MOT76	-.062	.371	.142
43	MOT77	-.010	.307	.095
44	MOT78	-.052	.610	.375
45	MOT79	.254	.351	.188
46	MOT80	-.006	.573	.329
47	MOT81	.071	.532	.288
48	MOT82	.093	.546	.307
Trace		9.32	3.56	12.88

Table 13
Varimax-Rotated Product Matrix for Age 21

Variable		I	II	h^2
1	MEN107	.506	.303	.348
2	MEN108	.668	.248	.508
3	MEN109	.668	.248	.508
4	MEN110	.668	.248	.508
5	MEN111	.638	-.110	.419
6	MEN112	-.056	.530	.284
7	MEN113	.722	.191	.558
8	MEN114	.501	.196	.290
9	MEN115	.428	.179	.215
10	MEN116	.138	.339	.134
11	MEN117	.401	.343	.278
12	MEN118	.287	.463	.297
13	MEN119	.146	.291	.106
14	MEN120	.489	.185	.273
15	MEN121	.351	.265	.194
16	MEN122	.504	.214	.299
17	MEN123	.326	.396	.263
18	MEN124	.127	.403	.179
19	MEN125	.455	.255	.272
20	MEN126	.367	.359	.263
21	MEN127	.343	.375	.259
22	MEN128	.303	.386	.241
23	MEN129	.346	.488	.358
24	MEN130	-.042	.521	.273
25	MEN131	.501	.461	.464
26	MEN132	.124	.308	.110
27	MEN133	.270	.405	.237
28	MEN134	.141	.476	.246
29	MEN135	.184	.645	.450
30	MOT70	-.145	.200	.061
31	MOT71	.219	.144	.069
32	MOT72	.362	.321	.234
33	MOT73	.344	.327	.226
34	MOT74	.403	.126	.179
35	MOT75	.264	.198	.109
36	MOT76	.036	.368	.137
37	MOT77	.344	-.058	.122
38	MOT78	.404	.068	.167
39	MOT79	.355	.284	.207
40	MOT80	.114	.460	.225
41	MOT81	.317	.021	.101
42	MOT82	.286	.183	.116
43	MOT83	.330	.040	.111
44	MOT84	.260	.048	.070
45	MOT85	.288	.093	.092
Trace		6.46	4.59	11.06

Note. Variable MOT86 was omitted as a constant.

Table 14
Varimax-Rotated Product Matrix for Age 24

Variable		I	II	h^2
1	MEN114	.331	.338	.224
2	MEN115	.413	.048	.173
3	MEN116	.202	.287	.123
4	MEN117	.439	.152	.215
5	MEN118	.316	.307	.195
6	MEN119	.237	-.009	.056
7	MEN120	.516	.002	.266
8	MEN121	.318	.281	.180
9	MEN122	.429	.177	.216
10	MEN123	.239	.227	.109
11	MEN124	.379	.418	.319
12	MEN125	.645	.078	.422
13	MEN126	.426	.392	.336
14	MEN127	.380	.237	.201
15	MEN128	.641	-.101	.421
16	MEN129	.257	.369	.202
17	MEN130	.641	-.008	.410
18	MEN131	.332	.472	.333
19	MEN132	.221	.127	.065
20	MEN133	.431	.302	.277
21	MEN134	.583	.275	.416
22	MEN135	.734	.303	.631
23	MEN136	.285	.456	.289
24	MEN137	.672	-.020	.451
25	MEN138	.286	.361	.212
26	MEN139	.531	.213	.327
27	MEN140	.594	-.034	.354
28	MEN141	.740	.228	.600
29	MEN142	.389	.178	.183
30	MEN143	.740	.228	.600
31	MEN144	.835	.162	.724
32	MEN145	.596	.318	.456
33	MEN146	.593	.274	.427
34	MEN147	.581	.267	.409
35	MEN148	.217	.179	.079
36	MOT75	.271	.276	.150
37	MOT76	.246	.108	.072
38	MOT77	-.049	.307	.097
39	MOT78	.080	.345	.125
40	MOT79	.141	.542	.314
41	MOT80	.084	.464	.222
42	MOT81	.242	.161	.085
43	MOT82	.187	.454	.241
44	MOT83	.041	.422	.179
45	MOT84	.105	.360	.141
46	MOT85	.271	.175	.104
47	MOT86	-.001	.544	.296
48	MOT87	.235	.320	.158
49	MOT88	.067	.216	.051
50	MOT89	.383	.129	.164
51	MOT90	-.134	.611	.392

52 MOT91	-.021	.579	.335
53 MOT92	.149	.263	.091
54 MOT93	.101	.461	.223
Trace	9.17	5.17	14.34

Note. Variable MEN113 was omitted as a constant.

Table 15
Varimax-Rotated Product Matrix for Age 27

Variable		I	II	h^2
1	MEN123	.075	.180	.038
2	MEN124	-.103	.414	.182
3	MEN125	.113	.535	.299
4	MEN126	.115	.467	.231
5	MEN127	-.151	.502	.275
6	MEN128	.302	.486	.327
7	MEN129	.165	.640	.437
8	MEN130	.049	.521	.274
9	MEN131	-.174	.420	.207
10	MEN132	.273	.037	.076
11	MEN133	.319	.442	.297
12	MEN134	.028	.357	.128
13	MEN135	.301	.695	.573
14	MEN136	.152	.689	.497
15	MEN137	.245	.491	.301
16	MEN138	.436	.244	.250
17	MEN139	.453	.368	.341
18	MEN140	.228	.430	.237
19	MEN141	.287	.793	.711
20	MEN142	.226	.325	.157
21	MEN143	.071	.273	.080
22	MEN144	.208	.490	.283
23	MEN145	.167	.625	.419
24	MEN146	.130	.609	.387
25	MEN147	.086	.479	.237
26	MEN148	.130	.443	.213
27	MEN149	.212	.710	.548
28	MEN150	.257	.792	.693
29	MEN151	.105	.538	.300
30	MEN152	.194	.535	.324
31	MEN153	.194	.535	.324
32	MEN154	.226	.325	.157
33	MOT78	.229	.186	.087
34	MOT79	.371	.187	.173
35	MOT80	.381	.166	.173
36	MOT81	.371	-.286	.219
37	MOT82	.508	.117	.272
38	MOT83	.330	.084	.116
39	MOT84	.560	.123	.328
40	MOT85	.230	.024	.054
41	MOT86	.457	.168	.237
42	MOT87	.423	.048	.181
43	MOT88	.338	.298	.203
44	MOT89	.403	.231	.216
45	MOT90	.346	-.048	.122
46	MOT91	.190	.196	.074
47	MOT92	.268	.173	.102
48	MOT93	.580	.172	.366
49	MOT94	.277	.288	.160
50	MOT95	.450	.074	.208
51	MOT96	.542	-.090	.302
Trace		4.52	8.87	13.40

Table 16
Varimax-Rotated Product Matrix for Age 30

Variable	I	II	h^2
1 MEN131	.164	.232	.081
2 MEN132	.006	.533	.284
3 MEN133	.028	.321	.104
4 MEN134	.303	.073	.097
5 MEN135	.533	.138	.303
6 MEN136	.101	.400	.170
7 MEN137	.374	.228	.192
8 MEN138	-.149	.475	.248
9 MEN139	.376	.127	.157
10 MEN140	.544	.055	.299
11 MEN141	.377	.270	.215
12 MEN142	.071	.453	.210
13 MEN143	-.198	.595	.393
14 MEN144	.113	.289	.097
15 MEN145	.232	.371	.192
16 MEN146	.466	.624	.607
17 MEN147	.156	.439	.217
18 MEN148	.131	.340	.133
19 MEN149	.312	.377	.239
20 MEN150	.379	.161	.169
21 MEN151	.291	.323	.189
22 MEN152	.180	.336	.145
23 MEN153	.430	.673	.638
24 MEN154	.379	.681	.607
25 MEN155	.402	.106	.173
26 MEN156	.282	.378	.222
27 MEN157	.320	.522	.375
28 MEN158	.282	.378	.222
29 MOT84	.268	.088	.080
30 MOT85	.095	.013	.009
31 MOT86	.202	.153	.064
32 MOT87	.107	-.052	.014
33 MOT88	.329	.143	.129
34 MOT89	.113	.397	.170
35 MOT90	.268	-.054	.075
36 MOT91	.458	.137	.228
37 MOT92	-.012	.485	.236
38 MOT93	.389	.094	.160
39 MOT94	.265	-.010	.070
40 MOT95	.277	.187	.112
41 MOT96	.368	.137	.154
42 MOT97	.236	.088	.063
43 MOT98	.483	.239	.291
44 MOT99	.300	.249	.152
45 MOT100	.465	.229	.269
46 MOT101	.285	.038	.083
Trace	4.28	5.06	9.34

Table 17
Varimax-Rotated Product Matrix for Age 36

Variable		I	II	h^2
1	MEN140	.367	.162	.161
2	MEN141	.268	.211	.116
3	MEN142	.537	-.050	.291
4	MEN143	.363	.166	.159
5	MEN144	.466	.106	.229
6	MEN145	.354	.188	.160
7	MEN146	.254	.363	.196
8	MEN147	.404	.305	.257
9	MEN148	.237	.115	.070
10	MEN149	.461	.234	.267
11	MEN150	.752	-.223	.615
12	MEN151	.261	.364	.201
13	MEN152	-.088	.616	.388
14	MEN153	.404	.071	.168
15	MEN154	.225	.213	.096
16	MEN155	.383	.186	.181
17	MEN156	.167	.569	.352
18	MEN157	.169	.355	.155
19	MEN158	.349	.444	.319
20	MEN159	.168	.531	.310
21	MEN160	-.081	.350	.129
22	MEN161	.258	.229	.119
23	MEN162	.508	.425	.438
24	MEN163	.395	.039	.157
25	MEN164	.222	.504	.303
26	MEN165	.443	.458	.407
27	MEN166	.500	.485	.485
28	MEN167	.294	.374	.226
29	MEN168	.206	.068	.047
30	MOT91	.172	.153	.053
31	MOT92	.407	.133	.183
32	MOT93	.239	.075	.063
33	MOT94	.052	.079	.009
34	MOT95	.063	.223	.054
35	MOT96	.198	.118	.053
36	MOT97	.372	.233	.193
37	MOT98	.335	.420	.289
38	MOT99	.066	.244	.064
39	MOT100	.212	.066	.049
40	MOT101	.137	.199	.058
41	MOT102	.097	.264	.079
42	MOT103	.245	.140	.080
43	MOT104	.094	.364	.141
44	MOT105	.428	.338	.297
45	MOT106	.082	.415	.179
46	MOT107	.436	.141	.210
47	MOT108	.202	.161	.067
48	MOT110	.319	.490	.342
49	MOT111	.318	.236	.157
Trace		5.10	4.52	9.62

Note. Variable MOT109 was omitted as a constant.

Table 18
Varimax-Rotated Product Matrix for Age 42

Variable		I	II	h^2
1	MEN146	.409	.423	.346
2	MEN147	.396	.219	.204
3	MEN148	.463	.276	.290
4	MEN149	.306	-.029	.095
5	MEN150	.446	-.054	.202
6	MEN151	.460	.267	.282
7	MEN152	.394	.401	.316
8	MEN153	.426	.052	.184
9	MEN154	.093	.381	.153
10	MEN155	.454	.417	.380
11	MEN156	.476	.136	.245
12	MEN157	.519	.316	.370
13	MEN158	.088	.666	.451
14	MEN159	.476	.218	.274
15	MEN160	.223	.132	.067
16	MEN161	.227	.305	.144
17	MEN162	.620	.405	.549
18	MEN163	.205	.276	.118
19	MEN164	.441	.414	.366
20	MEN165	.750	-.039	.564
21	MEN166	.688	.372	.612
22	MEN167	.456	.419	.383
23	MEN168	.109	.078	.018
24	MEN169	.204	.226	.093
25	MEN170	.422	-.017	.178
26	MEN171	.187	.278	.112
27	MEN172	.126	.492	.259
28	MEN173	.148	.238	.079
29	MEN174	.087	.343	.125
30	MEN175	.267	.174	.102
31	MEN176	.236	.251	.119
32	MEN177	.099	.520	.280
33	MEN178	.141	.275	.096
34	MOT96	.489	.227	.291
35	MOT97	.279	.140	.098
36	MOT98	.055	.401	.164
37	MOT99	.352	.345	.242
38	MOT100	.167	.061	.032
39	MOT101	.091	.122	.023
40	MOT102	.142	.213	.066
41	MOT103	.206	.210	.087
42	MOT104	.305	.250	.156
43	MOT105	.122	.183	.048
44	MOT106	.071	.100	.015
45	MOT107	.054	.279	.081
46	MOT108	-.086	.525	.283
47	MOT109	.183	.331	.143
48	MOT110	.014	.466	.217
49	MOT111	.083	.320	.109
Trace		5.46	4.64	10.11

Table 19
Schmid and Leiman (1957) for Age 2

1	MEN13	.350	-.294	-.125	-.106	.006	.076	-.016	-.141	.184	-.501	-.049	-.257	-.099	.013	.625
2	MEN14	.219	.198	.114	-.045	.005	.036	-.074	-.088	.050	.054	.137	.365	-.639	.001	.682
3	MEN15	.353	-.022	.724	-.043	.059	-.022	-.080	-.017	-.043	.114	.309	-.075	-.084	.088	.792
4	MEN16	.391	.024	.740	-.029	-.027	-.078	-.073	-.007	.013	-.021	.214	-.031	-.045	.098	.773
5	MEN17	.398	.087	.646	.025	-.151	.092	.093	.063	-.036	.066	-.196	-.024	-.043	-.067	.678
6	MEN18	.478	.170	.619	.056	-.187	-.011	.095	.043	.088	.023	-.147	.050	.078	-.121	.743
7	MEN19	.392	-.075	.073	-.049	.099	.018	-.032	.047	-.014	-.091	.067	.011	-.704	-.043	.691
8	MEN20	.385	.198	-.035	.062	.066	.034	-.064	-.133	-.056	-.581	.093	-.005	.130	-.044	.588
9	MEN21	.038	.399	.013	.047	.089	.622	.008	.081	-.040	.141	.128	-.066	-.214	-.042	.653
10	MEN22	.140	.362	.002	-.093	.011	.700	.097	-.064	.044	-.070	-.038	.020	.071	-.111	.689
11	MEN23	.571	-.231	.092	-.092	.203	-.020	-.207	-.186	.049	-.064	.029	-.103	.043	-.351	.658
12	MEN24	.375	-.184	.346	-.010	-.024	-.054	-.087	.001	-.252	-.098	-.033	-.314	-.029	-.202	.519
13	MEN25	.427	-.109	.082	-.218	-.047	-.182	.396	.004	.215	-.001	.409	-.043	.147	-.214	.724
14	MEN26	.424	.272	.136	.023	.023	-.089	-.018	.112	-.206	-.526	.009	.081	-.135	-.096	.648
15	MEN27	.486	.041	-.055	-.021	.279	-.258	.135	.244	-.083	-.368	-.107	.171	-.114	-.137	.679
16	MEN28	.473	.014	-.154	.148	.586	-.013	-.046	.142	-.005	-.037	.113	-.016	-.063	-.125	.669
17	MEN29	.442	-.054	.023	-.071	.579	.139	.002	.113	.126	-.114	-.041	.162	-.064	.032	.633
18	MEN30	.764	-.029	.424	-.008	.174	.116	.159	.025	.225	-.170	-.109	-.019	.017	-.076	.931
19	MEN31	.735	-.033	.549	.023	.136	.013	.052	-.004	.247	-.191	-.013	.021	-.166	.065	.995
20	MEN32	.407	-.194	.120	-.077	.180	-.028	.567	-.177	-.192	.211	-.007	.201	.011	-.127	.748
21	MEN33	.276	.124	-.081	.038	-.032	.301	.300	.098	.006	.158	.143	-.189	-.324	-.200	.516
22	MEN34	.733	.213	-.029	.058	.019	.114	.057	-.016	.017	-.076	-.075	-.014	-.070	-.579	.957
23	MEN35	.436	.097	.054	.127	.099	.001	.196	.006	.554	.126	.012	.143	.088	-.025	.619
24	MEN36	.552	-.196	.090	.223	-.051	-.101	.232	-.186	.068	-.138	-.128	-.199	-.054	-.079	.591
25	MEN37	.731	.185	-.029	.032	.057	.109	.055	-.038	-.033	-.068	-.050	-.002	-.064	-.587	.947
26	MOT7	.110	.403	.203	.115	.072	.089	.122	.022	-.108	-.034	.733	-.039	-.130	.181	.859
27	MOT8	.033	.341	-.233	.023	-.086	-.018	-.084	.045	.080	.056	.513	.014	-.237	-.204	.559
28	MOT9	.239	.078	.037	.208	.132	-.036	-.138	.357	.626	.089	-.098	-.148	.031	.038	.707
29	MOT10	.159	.235	.061	-.068	-.327	.039	-.092	.043	.513	-.102	-.007	.188	-.392	-.016	.671
30	MOT11	.181	.397	-.079	.111	.093	-.043	.142	-.143	.057	-.022	-.068	.651	-.176	.022	.724
31	MOT12	.193	-.067	-.046	.242	-.160	-.014	-.002	-.748	-.223	-.058	-.025	.127	.008	-.050	.760
32	MOT13	.243	.401	.245	.160	.015	.015	-.271	.056	.149	.085	.049	.092	.284	-.216	.551
33	MOT14	.235	.249	-.016	.071	-.075	.119	.640	.107	.089	-.080	.107	.052	.065	.054	.599
34	MOT15	.229	.549	-.040	.355	.058	.144	.258	-.070	-.037	-.097	.446	.017	.132	.066	.809
35	MOT16	.401	.342	.139	.555	.071	.074	-.096	-.243	.024	.115	-.086	.107	-.153	.002	.740
36	MOT17	.114	.682	.009	.143	-.018	.286	-.181	-.030	-.116	-.279	.267	.119	.089	-.089	.806
37	MOT18	.159	.653	-.010	.417	-.042	-.012	.120	.178	.037	.008	.113	.114	.125	-.062	.720
38	MOT19	.303	.373	-.086	.593	.047	-.026	-.083	-.174	.138	-.004	-.074	.031	.148	-.032	.679
39	MOT20	.440	.160	-.048	.401	.020	-.220	-.054	-.129	.135	.054	.169	.008	-.286	-.112	.594

40 MOT21	.314	.397	.043	.421	-.095	-.093	.140	-.015	.090	-.232	.237	-.072	.004	.094	.606
Trace	6.49	3.21	2.80	1.68	1.18	1.36	1.52	1.15	1.51	1.46	1.72	1.08	1.73	1.23	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 12 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 20
Schmid and Leiman (1957) for Age 3

1	MEN20	.521	-.044	.080	.037	-.066	-.143	.049	-.584	.120	-.170	-.051	-.152	.179	.040	.752
2	MEN21	.349	.217	-.055	.074	-.397	-.003	-.061	-.412	-.119	.204	-.044	.346	.004	.253	.750
3	MEN22	.507	.050	.173	-.064	-.523	.007	.007	.031	-.004	-.196	-.006	-.031	.246	-.158	.693
4	MEN23	.527	-.248	.186	-.100	-.007	.414	.150	-.184	.101	.025	-.107	-.089	.055	.151	.667
5	MEN24	.498	-.280	.077	-.129	-.317	.052	.073	-.023	.001	-.059	-.476	.112	-.023	.053	.704
6	MEN25	.425	-.133	.138	.155	-.116	.116	.525	.042	.216	.129	.035	.207	-.006	-.064	.658
7	MEN26	.343	-.117	-.116	.012	-.175	.004	.078	-.022	.474	-.117	-.001	-.078	.077	-.097	.441
8	MEN27	.450	-.157	-.108	-.016	.074	-.102	.151	-.243	.620	.092	.019	-.059	-.032	-.021	.735
9	MEN28	.259	.573	.079	.005	-.113	-.100	-.229	.177	.412	-.117	.139	.212	-.082	.118	.777
10	MEN29	.400	.106	-.064	-.003	-.102	-.050	-.130	-.001	.518	-.074	-.031	.238	.049	.003	.538
11	MEN30	.541	.084	.066	-.008	-.791	.026	.127	.007	.037	.121	-.184	.092	-.131	.029	1.023
12	MEN31	.476	.159	-.006	.061	-.658	-.025	.128	.029	.305	.081	-.024	-.120	-.096	.090	.838
13	MEN32	.338	-.194	-.202	-.190	-.277	-.220	.653	-.034	-.038	-.126	-.076	-.013	-.092	-.160	.839
14	MEN33	.461	.265	.111	.057	-.440	-.035	.059	-.115	-.026	.038	.184	.406	.195	-.108	.760
15	MEN34	.354	.056	.041	-.160	.069	-.105	-.016	.025	.160	.104	-.002	.498	.054	-.084	.467
16	MEN35	.306	.136	-.151	-.501	-.163	.048	-.089	-.066	-.097	-.085	.028	.110	-.080	.012	.464
17	MEN36	.286	.120	-.016	-.143	-.063	.192	.214	.134	-.072	-.110	-.139	.652	-.156	.034	.708
18	MEN37	.464	.141	.109	-.617	-.124	.064	-.272	-.025	-.079	.087	.126	-.119	.043	.016	.768
19	MEN38	.437	-.237	.008	-.608	.096	-.065	.109	.076	-.024	.138	-.061	.084	-.009	-.136	.697
20	MEN39	.711	-.027	-.077	-.453	.076	.040	.154	-.073	.222	-.079	-.028	.380	.106	.071	.971
21	MEN40	.607	.058	.041	-.518	.105	.013	.107	.008	.092	-.048	.031	.282	.027	.003	.756
22	MOT11	.157	.429	-.038	.028	-.041	-.051	-.160	-.146	.008	-.023	-.031	-.033	.040	.635	.670
23	MOT12	.174	-.100	.179	-.104	.200	.032	-.265	-.488	.122	.083	-.036	.051	-.250	-.340	.637
24	MOT13	-.149	.462	.018	.049	.126	-.096	-.066	-.116	-.023	-.369	-.048	.084	-.384	.051	.578
25	MOT14	.147	.429	-.002	-.039	-.083	-.636	-.100	-.044	.101	-.065	-.078	-.065	-.051	.220	.706
26	MOT15	.197	.268	.126	.056	.040	-.793	.214	-.116	.086	-.013	.035	-.071	.012	-.058	.837
27	MOT16	.350	.288	-.065	-.026	-.001	-.025	.051	-.695	.087	.136	.210	-.025	-.149	.247	.851
28	MOT17	.396	.405	.146	-.174	.013	.068	.075	-.168	.016	.012	.527	-.036	.220	.086	.746
29	MOT18	.248	.413	.144	.009	.132	-.075	-.068	-.112	-.049	-.497	-.112	.017	.110	.383	.714
30	MOT19	.364	.402	.427	-.057	-.137	-.246	.043	-.039	-.135	.061	.147	.027	-.031	-.057	.611
31	MOT20	.260	.529	.161	.011	.064	.058	.101	-.005	-.016	-.161	.110	.043	-.018	.485	.667
32	MOT21	.362	.089	.395	-.166	.070	-.308	-.119	.195	.016	.203	-.168	-.039	.085	.158	.578
33	MOT22	.433	.363	.551	.069	-.095	.038	-.070	-.092	.066	-.179	-.035	-.003	-.194	-.089	.734
34	MOT23	.010	.300	.287	.045	-.080	.006	.078	-.046	-.017	.069	-.137	.004	-.704	-.086	.716
35	MOT24	.317	.383	.271	.066	.139	-.069	.456	-.038	-.113	-.228	.129	.188	-.036	.150	.699
36	MOT25	.250	.432	.238	.029	.034	-.002	.123	.155	.063	-.692	.005	-.015	.023	.039	.832
37	MOT26	.350	.421	.459	-.050	-.077	.245	-.129	.016	.031	-.203	.090	-.103	-.153	.041	.682
38	MOT27	.290	.428	.545	.034	-.010	-.134	.076	.055	-.152	-.042	.035	.025	-.134	.028	.638
39	MOT28	.469	.274	.581	.033	-.065	-.031	-.018	-.087	-.110	-.095	-.086	.058	-.043	-.008	.681
40	MOT29	.332	.493	.249	-.156	-.047	-.080	.215	.064	.090	-.028	.159	-.107	-.333	.130	.671

Trace	6.03	3.61	2.12	1.75	2.17	1.65	1.54	1.59	1.46	1.38	.87	1.52	1.23	1.33

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 12 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 21
Schmid and Leiman (1957) for Age 4

1	MEN30	.208	.195	.047	.077	.001	-.096	.728	.093	.056	-.011	-.127	-.161	.010	.021	.184	-.043	.719
2	MEN31	.312	.170	-.064	-.083	-.035	-.157	.013	.096	-.132	.030	-.087	.025	.768	.172	.093	-.189	.864
3	MEN32	-.052	.244	.015	-.042	-.027	-.063	-.082	.041	.111	-.108	.726	.040	-.062	-.108	.085	-.040	.654
4	MEN33	.126	.196	.070	.131	.087	.142	.002	-.065	.077	-.119	-.131	.046	.173	.735	.043	-.131	.736
5	MEN34	.408	.161	-.049	-.046	.126	.182	.065	-.031	-.584	-.244	.015	.130	.019	-.239	.048	.011	.729
6	MEN35	.147	.209	.108	-.087	.066	-.024	-.107	.101	-.726	-.045	-.158	-.006	.024	-.053	.012	.092	.677
7	MEN36	.410	.243	.118	.043	.077	.137	.441	-.247	.258	-.008	-.025	.066	.162	-.257	-.116	.011	.700
8	MEN37	.025	.611	-.018	.007	.080	-.040	-.012	-.111	-.474	.084	.061	-.253	.125	.237	-.292	.093	.861
9	MEN38	.429	.342	.530	.103	-.054	.030	-.026	-.149	-.089	.067	.200	-.023	-.012	-.134	.064	.143	.715
10	MEN39	.347	.287	.386	.090	.064	-.002	-.225	-.011	-.048	.163	.093	.076	.216	-.016	.178	.173	.567
11	MEN40	.075	.743	.091	.151	.052	.092	.075	.279	-.206	.175	.298	.109	.043	-.117	-.186	-.052	.911
12	MEN41	.400	-.096	.078	.198	.034	.154	-.038	-.137	-.304	.008	-.052	-.285	-.104	-.004	.038	-.446	.647
13	MEN42	.179	.291	.623	-.005	-.036	-.123	.043	-.023	-.168	-.056	-.083	.059	-.073	-.006	-.192	-.177	.639
14	MEN43	.339	.383	.671	-.008	.152	.022	-.003	.045	.097	-.029	-.103	.106	-.067	.106	-.090	.102	.804
15	MEN44	.182	.368	.698	-.103	.057	-.075	.013	.101	-.011	.106	-.035	.045	-.035	-.068	-.096	-.016	.715
16	MEN45	.618	.322	.528	-.087	.114	.150	.098	.096	-.029	-.069	.031	-.186	-.007	.111	.021	-.049	.882
17	MEN46	.488	.109	-.136	-.067	.265	-.051	-.049	-.115	.163	-.280	.180	-.217	.186	.038	-.116	.030	.596
18	MEN47	.379	.460	.299	.081	-.190	-.028	.000	-.155	-.460	-.109	.097	-.030	.190	.098	-.172	.022	.822
19	MEN48	.612	.327	.559	-.066	.127	.144	.082	.115	-.004	-.051	.018	-.152	-.009	.110	.037	-.049	.898
20	MEN49	.327	.479	.091	-.001	.786	.020	.002	.002	-.050	.004	-.011	-.065	-.017	.025	.073	.037	.977
21	MEN50	.343	.457	.080	.031	.781	-.004	-.010	-.014	-.035	-.042	-.008	-.037	-.020	.027	.067	.031	.956
22	MEN51	.380	.173	-.016	-.048	.136	-.116	.088	.058	.006	.109	-.028	-.727	-.038	-.026	-.244	.027	.824
23	MEN52	.327	.479	.091	-.001	.786	.020	.002	.002	-.050	.004	-.011	-.065	-.017	.025	.073	.037	.977
24	MOT17	.231	.041	.031	-.016	.031	.740	-.057	-.055	-.042	.126	-.048	.072	-.113	.136	.007	-.051	.671
25	MOT18	.169	.230	.119	.019	-.139	.001	-.169	-.022	-.078	-.105	-.066	-.174	-.088	-.049	-.695	-.030	.690
26	MOT19	.247	.108	.074	-.043	-.056	-.166	.039	.771	-.025	-.026	.160	-.163	-.027	-.102	.176	-.064	.807
27	MOT20	.144	.264	-.154	.048	.109	.329	-.106	.268	.080	.020	.343	-.059	-.155	-.041	-.144	-.101	.504
28	MOT21	.240	.124	-.032	.028	.074	-.244	.006	.111	-.183	-.674	.093	.195	-.075	.181	-.112	.068	.743
29	MOT22	.550	-.107	.029	.201	.072	.034	-.477	.303	.093	-.042	-.163	-.042	.114	-.073	-.111	.021	.751
30	MOT23	.166	.141	.022	.077	.092	-.050	-.061	-.185	-.168	-.076	-.072	-.037	-.192	-.112	.039	.789	.817
31	MOT24	.279	.287	-.071	.105	.114	.127	-.105	.641	-.079	-.049	-.086	.190	.143	.076	-.068	-.120	.724
32	MOT25	.387	.260	.132	.059	-.080	-.066	.024	.521	.158	-.086	.009	-.149	.016	-.027	-.296	-.068	.669
33	MOT26	.358	.133	-.001	.411	.078	-.395	-.018	.118	.033	-.035	-.044	-.047	.048	-.319	-.071	.029	.608
34	MOT27	.539	.102	-.104	.215	-.081	.052	.129	.188	-.159	.122	-.102	-.333	.151	-.067	.099	.058	.621
35	MOT28	.725	-.037	.147	.079	-.227	.205	.034	.134	-.080	-.280	-.029	-.015	.032	-.115	-.050	.051	.773
36	MOT29	.158	.337	.034	.202	-.088	.107	.130	.345	.086	-.029	-.018	.015	-.071	.354	.049	.315	.577
37	MOT30	.234	.198	.097	.686	.026	-.077	-.064	-.186	.196	.116	.027	.027	-.070	.084	-.018	-.170	.714
38	MOT31	.467	.350	.086	.490	.103	-.185	.126	.069	.002	-.158	.165	.045	.016	.051	.153	-.054	.737
39	MOT32	.363	.231	-.094	.555	.017	.017	.067	.045	-.040	.003	-.167	-.055	-.144	-.016	-.132	.122	.595
40	MOT33	.357	.301	-.050	.591	-.036	.027	-.007	.049	-.010	.006	.089	.051	.009	.135	.064	-.022	.608

41 MOT34	.516	.084	.016	.443	-.160	.103	-.114	-.015	.076	-.132	.042	-.056	-.025	.163	-.023	.112	.588
42 MOT35	.414	.340	-.148	.561	.075	.059	.109	.053	-.091	.009	-.080	.048	.003	-.022	-.038	.053	.670
Trace	5.50	3.83	2.68	2.37	2.27	1.26	1.21	2.03	1.84	.93	1.08	1.17	.99	1.24	1.12	1.21	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 14 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 22
Schmid and Leiman (1957) for Age 5

1	MEN42	.404	-.040	.027	.692	-.014	.001	-.035	-.046	.002	-.052	.044	-.084	-.057	.662
2	MEN43	.456	.039	-.007	.481	-.018	-.069	-.170	.052	.079	-.043	.149	.064	-.011	.513
3	MEN44	.539	.053	-.014	.637	.048	-.026	-.036	.066	-.002	-.013	-.008	.054	.036	.713
4	MEN45	.551	.044	-.015	.668	-.009	.189	.091	.076	-.154	.015	-.016	-.017	-.085	.834
5	MEN46	.462	.020	-.064	.646	-.026	.103	-.132	.052	.090	.021	-.059	.012	-.043	.681
6	MEN47	.252	.159	.055	-.043	-.088	-.069	-.135	.028	.089	-.018	-.051	-.140	.690	.632
7	MEN48	.433	.096	.044	.295	.256	.004	.074	-.022	-.076	-.234	.001	.068	.089	.430
8	MEN49	.313	.461	-.004	.208	.002	-.194	-.400	-.075	-.105	.326	.239	.023	-.041	.733
9	MEN50	.274	.481	-.030	.065	-.052	.176	-.528	-.048	.038	.129	.084	.007	-.041	.653
10	MEN51	.350	-.066	.030	.008	.566	-.097	.135	-.036	.093	.272	-.074	.089	-.296	.661
11	MEN52	.118	.368	.001	.002	-.036	-.073	-.533	.185	.092	-.163	-.060	-.044	.248	.576
12	MEN53	.604	.034	.206	.344	-.069	.026	.055	.141	-.176	-.154	.304	-.084	.060	.714
13	MEN54	.363	.234	-.095	.035	.011	.418	-.020	-.176	-.010	.094	-.002	.107	.093	.432
14	MEN55	.415	-.091	.072	.201	.031	.492	-.021	-.075	.202	-.307	.010	.057	-.152	.636
15	MEN56	.402	.219	-.037	-.070	.022	.149	-.013	.121	.100	-.068	.064	.685	-.163	.767
16	MEN57	.602	.422	.064	.027	.087	.232	-.027	.023	-.104	-.139	.044	.343	.180	.790
17	MEN58	.464	-.099	.265	.037	-.135	.506	.095	.106	.102	-.155	.026	-.022	-.096	.635
18	MEN59	.733	.411	.203	-.082	.100	.353	-.110	.118	-.087	.135	.090	.135	-.039	.968
19	MEN60	.733	.411	.203	-.082	.100	.353	-.110	.118	-.087	.135	.090	.135	-.039	.968
20	MEN61	.348	.446	.073	.075	.070	.118	-.195	.064	-.054	.324	-.251	.003	.151	.585
21	MEN62	.686	.368	.341	-.076	.116	.270	-.102	.118	-.072	.144	.040	-.001	-.024	.867
22	MEN63	.384	.176	.176	-.041	-.042	.014	-.024	-.005	.016	.730	.021	-.071	-.001	.753
23	MEN64	.547	.295	.752	.002	-.024	.040	.015	-.017	.014	.081	-.027	-.009	.006	.962
24	MEN65	.547	.295	.752	.002	-.024	.040	.015	-.017	.014	.081	-.027	-.009	.006	.962
25	MEN66	.547	.295	.752	.002	-.024	.040	.015	-.017	.014	.081	-.027	-.009	.006	.962
26	MOT25	.431	-.272	-.029	-.088	-.220	.006	.113	.365	.044	.166	.424	.128	-.031	.689
27	MOT26	.392	-.035	-.018	.060	.043	-.041	-.030	.655	.017	-.129	-.124	.190	.034	.662
28	MOT27	.208	-.070	.125	.255	-.125	.008	.007	-.030	.364	.162	-.270	.237	.121	.448
29	MOT28	.500	-.061	-.031	.044	.049	.064	-.165	-.046	.149	.017	.485	.069	-.144	.576
30	MOT29	.454	-.112	-.050	.405	-.074	.301	.084	-.123	.056	.201	.019	-.213	.146	.613
31	MOT30	.387	-.462	-.035	.131	.165	.019	.027	.075	.450	.083	.053	-.017	-.045	.630
32	MOT31	.651	.052	-.147	.184	.140	.287	.048	.099	.004	.118	.024	.037	.163	.638
33	MOT32	.461	.046	-.048	.014	.641	.026	-.034	.057	.016	-.135	-.008	-.010	-.159	.677
34	MOT33	.507	-.078	-.125	-.061	-.088	.129	.128	-.047	.112	.183	.265	.118	.406	.620
35	MOT34	.467	.211	.110	.032	-.013	.058	-.069	-.298	-.041	-.077	.486	.127	.078	.639
36	MOT35	.511	-.065	.058	.195	.026	-.224	.169	.157	.036	.059	.200	.336	.080	.575
37	MOT36	.635	-.304	-.163	.055	.269	.061	.010	.153	.134	-.016	.359	-.172	.098	.812
38	MOT37	.235	-.304	.009	-.255	.001	.047	-.106	.014	.499	-.120	.161	.083	.224	.572
39	MOT38	.664	-.034	.031	.142	.033	.053	-.109	.567	.027	.104	.070	-.024	-.003	.817
40	MOT39	.551	-.017	.417	-.020	.230	-.058	.058	-.092	.170	-.013	.132	-.030	.071	.599

41 MOT40	.669	.018	.172	-.086	.370	.049	.008	.063	.058	.144	.111	-.218	.170	.740
42 MOT41	.494	.212	-.012	-.052	.507	.061	.013	-.076	.001	-.087	-.035	.121	.117	.595
Trace	10.11	2.49	2.38	2.74	1.54	1.50	1.04	1.27	.89	1.42	1.33	1.10	1.18	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 11 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 23
Schmid and Leiman (1957) for Age 6

1	MEN49	.349	.008	.120	-.065	.082	.095	.540	.011	-.274	-.094	-.100	.304	-.172	.002	.664
2	MEN50	.338	.188	.111	.038	-.005	-.164	.712	.048	.119	-.024	-.074	-.203	.023	.067	.765
3	MEN51	.480	-.045	.057	.002	.007	-.021	-.136	.033	.072	.023	.116	.653	-.058	-.033	.706
4	MEN52	.261	.458	.183	.088	-.019	-.042	.480	-.039	.103	.060	.162	-.232	.112	-.028	.661
5	MEN53	.505	-.004	.151	.647	.009	.012	-.120	-.033	-.009	.025	-.069	.004	-.039	-.156	.744
6	MEN54	.459	.398	.018	.425	-.041	.039	.092	-.025	-.100	-.139	.045	.074	-.118	.231	.666
7	MEN55	.486	.246	-.034	.591	-.021	-.099	.078	-.073	.036	-.003	-.028	.003	-.094	.131	.697
8	MEN56	.255	.108	.088	.010	.052	.010	-.004	-.022	.739	.089	.124	.159	-.001	.130	.700
9	MEN57	.581	.137	.049	.300	.029	-.037	.060	-.046	.244	.028	-.103	.028	.027	.361	.660
10	MEN58	.529	-.315	.099	.386	-.041	-.047	-.137	.085	-.077	.184	-.232	-.023	.221	-.020	.712
11	MEN59	.721	.271	.287	.242	.010	-.075	.149	-.076	.118	-.061	.059	.142	.145	-.019	.830
12	MEN60	.208	.381	.123	-.093	-.047	-.158	-.144	.132	.121	.118	.476	.180	-.092	-.122	.588
13	MEN61	.568	.200	.299	.061	.047	.109	.219	.014	-.085	-.039	.022	.063	.244	-.035	.592
14	MEN62	.550	-.134	.258	.090	.258	-.220	-.165	-.015	.042	.033	-.069	-.091	.104	-.136	.582
15	MEN63	.445	-.090	.330	-.128	-.131	.095	.245	.117	-.219	.057	-.078	.096	.213	-.014	.544
16	MEN64	.736	.101	.620	.033	.011	.005	.045	-.015	.026	-.023	.045	.015	-.026	-.037	.945
17	MEN65	.736	.101	.620	.033	.011	.005	.045	-.015	.026	-.023	.045	.015	-.026	-.037	.945
18	MEN66	.745	.111	.608	.044	.034	-.005	.042	-.030	.020	-.023	.043	.011	-.024	-.036	.948
19	MEN67	.208	.266	.033	.325	.004	.101	-.105	.328	.051	-.313	.128	-.108	-.199	.059	.522
20	MEN68	.736	.101	.620	.033	.011	.005	.045	-.015	.026	-.023	.045	.015	-.026	-.037	.945
21	MEN69	.670	-.102	.526	.009	.004	.036	.075	.212	.001	.081	-.003	-.023	-.091	-.016	.804
22	MEN70	.670	-.165	.381	-.009	.020	.024	.016	.384	-.010	.126	-.011	-.027	-.081	.100	.804
23	MEN71	.504	-.122	.076	-.016	-.047	.040	-.013	.690	-.015	-.056	.034	-.007	.112	.110	.784
24	MEN72	.581	-.137	.170	.015	.016	.105	.000	.605	-.032	.038	.016	-.007	.051	.115	.781
25	MEN73	.416	-.141	-.106	-.081	.118	-.180	.072	.665	-.008	-.045	.087	.058	.120	-.091	.740
26	MOT28	.533	.124	-.108	.350	-.095	-.366	.069	.108	-.202	.111	.050	.108	-.008	.040	.661
27	MOT29	.114	-.047	.024	-.076	.043	.188	-.186	.016	.054	.618	.154	.059	.215	.074	.558
28	MOT30	.324	-.089	.282	-.288	-.072	-.165	-.173	-.074	.260	-.198	-.093	.117	.028	.265	.543
29	MOT31	.524	.310	-.103	.156	-.076	-.058	.045	-.024	-.023	.066	-.005	.126	.177	.495	.715
30	MOT32	.526	-.104	.012	.093	.000	-.095	-.106	-.030	.239	.105	.056	.644	-.056	.015	.807
31	MOT33	.448	.081	.095	.138	.202	-.011	-.460	.052	-.403	.049	.058	.017	-.074	.156	.689
32	MOT34	.558	.042	-.020	.076	-.029	-.695	.088	.078	-.061	-.035	.018	.022	-.026	.009	.823
33	MOT35	.513	.077	-.051	.026	.130	-.707	.065	-.019	-.006	-.077	.026	.022	.007	-.048	.802
34	MOT36	.493	.212	.021	-.003	-.048	-.698	-.001	-.079	-.009	-.071	.106	.030	.087	.007	.809
35	MOT37	.424	.145	-.065	-.056	.171	.077	.008	.182	.103	.046	-.074	-.115	.075	.607	.682
36	MOT38	.329	.071	-.021	-.105	-.124	-.067	.011	.114	-.041	.081	-.056	-.114	.739	.145	.749
37	MOT39	.137	.455	.009	-.113	.214	-.038	-.017	-.047	-.404	-.571	.057	-.059	.144	.045	.807
38	MOT40	.341	.358	.024	.007	.537	.080	.063	-.035	.329	.052	.163	-.114	.085	.067	.707
39	MOT41	.459	-.019	-.109	.266	.162	.078	.118	.087	.225	-.149	-.140	.220	.280	.013	.566
40	MOT42	.479	.272	.121	.030	.028	-.177	-.135	-.018	-.507	-.070	.045	-.085	.257	.102	.718

41	MOT43	.341	.034	-.094	-.008	.520	.098	-.124	.010	-.007	-.013	-.007	.098	.358	-.102	.570
42	MOT44	.337	.045	-.024	-.010	.322	-.142	.208	-.192	-.127	.472	.008	-.008	-.062	.110	.575
43	MOT45	.432	.018	.108	.121	.589	.109	-.136	-.117	-.239	-.040	-.104	-.041	-.133	.049	.696
44	MOT46	.459	.061	-.034	-.069	.671	-.025	.157	.097	.058	.084	.046	.062	-.190	.039	.759
45	MOT47	.557	.128	-.024	-.071	.463	-.122	-.041	.021	.012	.003	-.003	.046	.076	.220	.620
46	MOT48	.473	-.159	.032	-.085	.497	-.221	.055	.166	.010	-.082	-.089	-.004	-.090	-.044	.609
Trace		11.18	1.76	2.63	1.81	2.24	2.05	1.76	1.82	1.83	1.29	.55	1.31	1.37	1.17	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 12 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 24
Schmid and Leiman (1957) for Age 8

1	MEN59	.373	.021	.497	.048	-.012	-.072	.040	-.004	.009	.057	-.160	-.074	-.043	-.060	.436
2	MEN60	.254	.286	.194	-.004	.178	.316	-.097	-.004	-.028	-.038	-.445	-.041	.336	-.075	.645
3	MEN61	.190	.254	.220	.016	-.054	-.057	-.399	-.010	.520	.110	-.071	-.078	.015	.148	.630
4	MEN62	.059	.367	.102	.000	.003	.011	-.552	-.082	.008	.136	-.016	-.047	.065	.014	.486
5	MEN63	.492	.227	.556	.009	-.109	.012	-.160	.027	.230	.010	.113	-.097	.088	.090	.733
6	MEN64	.347	-.049	.010	.015	.161	-.092	-.036	.094	.749	-.041	.150	-.055	-.053	.089	.766
7	MEN65	.286	.206	.227	.026	.074	.144	-.580	.071	.111	-.108	-.068	.098	-.330	.082	.698
8	MEN66	.485	-.009	.435	-.012	.060	-.183	.133	.143	.051	.082	.007	.100	.405	-.031	.684
9	MEN67	.347	.246	.184	.005	.170	.017	-.005	-.086	.047	-.036	.041	.247	.034	.570	.643
10	MEN68	.523	.169	.761	.049	-.054	.008	-.109	-.082	-.065	-.055	.013	.007	.045	-.037	.917
11	MEN69	.562	.085	.753	-.001	-.061	.084	-.155	-.044	-.038	-.056	.063	.002	-.110	-.020	.948
12	MEN70	.346	.245	.222	-.038	.134	.066	.135	-.159	.002	-.020	.242	-.443	-.049	-.125	.570
13	MEN71	.670	.153	.046	.018	.614	.052	-.010	.008	.085	-.126	.065	-.037	-.092	-.014	.891
14	MEN72	.447	-.256	.240	-.148	.257	-.005	.150	.258	-.093	.108	-.283	.004	-.060	-.152	.626
15	MEN73	.670	.153	.046	.018	.614	.052	-.010	.008	.085	-.126	.065	-.037	-.092	-.014	.891
16	MEN74	.593	.082	.673	-.053	.050	-.015	-.035	.056	-.039	-.062	.029	.003	-.094	.049	.839
17	MEN75	.652	.047	-.061	-.072	.677	.026	-.024	.000	.055	.080	.047	.034	.016	.031	.911
18	MEN76	.594	-.085	-.076	.045	.385	-.087	-.008	.047	-.077	.438	-.043	-.029	-.057	.079	.736
19	MEN77	.393	.064	.100	.239	.287	-.061	.083	-.366	-.079	.087	.202	-.019	-.033	-.038	.509
20	MEN78	.389	-.120	.099	.091	.179	-.135	-.025	.003	.062	.144	.004	-.080	-.537	.098	.564
21	MEN79	.440	-.130	-.036	-.184	.226	.046	-.116	.155	-.085	.075	.540	.082	.073	-.043	.655
22	MEN80	.657	-.004	-.098	.030	.591	-.011	-.044	-.025	.075	.220	.022	.058	-.002	.080	.858
23	MEN81	.672	.059	-.054	-.038	.667	.049	-.025	-.010	.060	.063	.052	.033	.018	.024	.921
24	MEN82	.355	-.183	-.065	.095	.025	.043	-.057	-.150	-.027	.628	.062	-.203	-.068	-.047	.648
25	MOT42	.158	.251	-.047	-.090	-.111	.153	-.102	.077	.101	.292	.028	-.596	-.064	-.068	.610
26	MOT43	.356	.106	-.006	.069	.035	-.057	-.506	.475	.100	-.032	.058	-.018	.014	-.285	.725
27	MOT44	.226	.423	-.078	.541	.071	-.110	-.197	-.059	-.159	.016	-.225	-.030	.066	-.049	.672
28	MOT45	.430	.650	-.086	.306	.157	-.053	-.132	.213	-.169	-.164	.026	-.156	.033	.207	.924
29	MOT46	.461	.232	-.083	.281	.016	-.011	.055	.339	.203	-.067	.038	-.246	.153	-.101	.611
30	MOT47	.499	.023	.003	.175	.020	-.111	.093	.615	.128	-.120	-.139	.007	-.038	.070	.736
31	MOT48	.340	-.050	.108	-.158	.081	-.120	.133	.028	.149	-.019	.677	-.213	-.012	-.065	.726
32	MOT49	.358	.067	.036	-.044	.011	.766	.000	-.033	-.113	.000	-.071	-.159	.033	.025	.769
33	MOT50	.292	-.248	.185	.154	.052	-.070	.019	.033	-.148	-.017	.209	.042	.212	-.577	.659
34	MOT51	.430	-.192	-.075	-.042	-.007	.105	-.097	.560	-.029	-.038	.234	.043	.025	-.164	.649
35	MOT52	.606	.284	.008	.192	-.052	.046	.037	.417	-.228	-.005	.218	-.173	-.044	.188	.833
36	MOT53	.417	.184	.066	.689	-.077	-.073	.023	-.007	.037	.023	-.257	.026	-.014	.004	.768
37	MOT54	.583	-.117	.043	.449	.051	.100	.048	.162	-.060	-.012	-.085	.064	-.274	-.048	.691
38	MOT55	.559	.066	.226	.067	-.130	.047	.051	.343	-.491	.156	.160	.014	.047	.154	.829
39	MOT56	.384	-.041	-.035	-.038	.081	.747	-.041	.007	-.048	.020	-.095	-.024	.030	.042	.734
40	MOT57	.426	-.202	.015	.236	-.059	.347	.340	-.023	.278	-.022	.127	.077	.215	.087	.672

41 MOT58	.532	-.302	.016	.413	-.056	.082	-.061	.053	.042	.113	.249	.112	-.255	-.124	.731
42 MOT59	.650	-.093	-.017	.278	.075	.228	.112	.143	.026	.183	-.019	-.080	-.059	.016	.644
43 MOT60	.535	-.136	-.024	.574	-.042	-.036	-.030	.059	.108	.131	.071	.106	-.055	-.105	.701
Trace	9.37	1.86	2.82	2.06	2.63	1.66	1.46	1.77	1.55	1.01	1.64	.96	1.03	1.06	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 12 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 25
Schmid and Leiman (1957) for Age 10

1	MEN64	.284	.124	.153	.133	.132	.169	.001	.025	-.157	-.063	.369	-.025	.036	.191	.179	.030	-.084	.427
2	MEN65	.196	.274	-.010	.055	.025	.049	-.148	.673	-.135	-.024	.243	-.093	.003	-.027	.046	-.127	.198	.739
3	MEN66	-.032	.127	-.056	.003	.010	.114	.167	.014	.109	.841	-.022	-.074	.092	.138	-.045	-.013	-.021	.817
4	MEN67	.098	.267	.443	.122	-.009	.067	.206	.174	-.080	.322	-.087	.095	-.268	.043	.055	-.015	.213	.618
5	MEN68	.288	-.049	.001	-.024	.027	-.058	.144	-.105	-.007	-.154	.135	.596	-.080	.241	.098	-.043	.181	.628
6	MEN69	.252	-.160	-.024	.088	-.104	.102	.697	-.013	.076	.278	.025	-.089	-.033	.048	.147	-.002	-.235	.777
7	MEN70	.192	-.158	-.074	-.177	-.070	.125	-.006	.167	-.050	-.013	.803	.010	-.021	.085	-.187	.045	.041	.841
8	MEN71	.422	.060	-.051	.064	-.019	.725	.015	.164	.042	.071	.013	.069	.014	-.113	.014	-.020	-.123	.782
9	MEN72	.456	.295	.264	-.062	-.088	-.068	.313	-.062	-.123	.174	-.076	.230	.224	.017	-.137	.051	.050	.661
10	MEN73	.331	.190	.087	-.082	.063	.033	.795	-.003	-.079	.041	-.003	.011	.026	-.098	-.188	.010	-.018	.851
11	MEN74	.279	.573	.026	-.053	.588	-.029	.068	.109	-.014	.059	-.122	.070	.149	.099	-.039	-.063	-.093	.842
12	MEN75	.311	.177	-.065	-.006	.140	-.084	.211	.529	.098	.064	.012	.113	-.026	.003	.213	-.064	.059	.563
13	MEN76	.233	.081	.008	-.090	-.084	.750	.057	.035	.055	.181	.179	-.020	.049	.005	-.015	.074	.102	.730
14	MEN77	.308	.183	-.085	.047	.137	.123	-.006	-.002	-.109	.142	-.054	-.077	.701	-.043	.121	-.084	.213	.772
15	MEN78	.169	.101	.045	-.035	.186	.714	.083	-.215	-.032	-.047	.029	.037	.100	-.013	.104	.018	.013	.666
16	MEN79	.046	.488	-.155	-.155	.111	-.009	.318	.155	-.203	-.342	.023	.113	-.102	-.008	.052	.188	-.146	.667
17	MEN80	.289	.123	.062	.035	.660	.068	-.135	.016	.220	-.063	-.121	.152	.147	-.112	.132	-.016	.046	.707
18	MEN81	.231	.273	-.118	.060	-.097	-.075	-.060	-.009	.175	.184	.117	.103	-.041	.767	.026	.021	.103	.855
19	MEN82	.018	.144	.056	.007	-.029	-.009	-.147	.184	.068	-.018	.041	.007	.187	.084	-.084	-.024	.834	.833
20	MEN83	.186	.252	.155	-.075	.002	-.054	-.412	.147	.007	.207	.137	.267	-.024	-.061	.007	.282	-.142	.559
21	MEN84	.211	.058	.011	.125	.577	.012	.096	.061	.161	.054	.212	-.034	-.132	-.143	-.277	.027	.018	.600
22	MEN85	.170	-.143	.025	-.179	.219	.050	-.048	-.061	.679	.129	-.089	-.020	-.120	.178	-.004	.183	.067	.708
23	MEN86	.265	.617	.005	-.066	.134	-.019	.087	.228	.057	.114	-.224	-.214	.147	.222	-.147	.009	-.056	.741
24	MEN87	.133	.270	.015	.152	-.043	.060	.017	-.174	.191	-.024	.050	-.081	-.073	.028	.096	.704	-.016	.707
25	MOT51	.300	.045	.827	-.034	.009	.025	.026	-.031	.004	.024	-.081	-.078	-.083	-.167	-.018	.029	.034	.830
26	MOT52	.555	.048	.670	-.106	.118	-.046	-.008	-.069	.078	-.153	.033	.077	.087	.051	.007	-.023	-.003	.839
27	MOT53	.460	.080	-.026	.134	.106	.112	-.140	.042	-.023	-.013	-.082	.664	-.082	-.034	-.016	-.030	-.095	.748
28	MOT54	.736	-.239	.088	.202	-.011	-.075	.131	.098	.139	.005	.150	.160	.072	.076	-.035	-.104	-.276	.847
29	MOT55	.662	-.090	.292	.033	-.069	-.025	.023	.108	.098	-.297	.143	-.101	.306	.006	.085	.033	.020	.781
30	MOT56	.116	.447	.065	.132	.291	-.058	-.175	-.039	-.061	-.038	.051	-.168	-.068	.230	-.382	.000	-.066	.599
31	MOT57	.112	.095	-.091	-.006	.116	-.171	.136	-.085	-.015	.174	.230	-.008	-.016	-.086	-.773	-.004	.113	.800
32	MOT58	.475	.214	-.004	.556	-.036	.011	-.053	-.091	-.219	.118	.020	.030	.265	.028	-.056	.148	-.043	.754
33	MOT59	.405	-.026	.083	.525	.012	-.165	.216	.089	.025	-.206	-.044	-.154	.003	-.083	.042	.147	.100	.638
34	MOT60	.650	-.157	-.072	.172	.045	.048	.157	-.105	.089	-.061	.091	.314	.156	-.066	-.345	-.046	.026	.791
35	MOT61	.469	.009	-.064	.716	.062	.106	-.040	.058	-.088	-.024	-.034	.067	-.081	.039	-.037	-.032	-.065	.785
36	MOT62	.379	.101	-.087	.692	.021	-.098	-.084	-.004	-.035	.093	-.223	.135	.032	.069	-.002	.053	.068	.748
37	MOT63	.376	.055	.182	.057	-.135	.186	-.057	-.065	.032	-.217	-.112	.056	-.184	.085	-.534	-.161	-.058	.660
38	MOT64	.425	.394	-.117	.125	-.088	.203	.025	.167	.056	-.282	-.136	.066	.043	.039	-.191	.198	.215	.673
Trace		4.61	2.18	1.70	1.93	1.49	1.90	1.90	1.16	.88	1.59	1.28	1.31	1.06	1.00	1.57	.82	1.20	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 15 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 26
Schmid and Leiman (1957) for **Age 12**

1	MEN71	.391	-.205	.100	-.098	-.002	-.016	.792	-.141	-.164	-.005	-.149	.010	.236	-.049	-.030	.971
2	MEN72	.503	-.109	.486	.133	-.047	-.005	.124	.031	-.010	-.108	.194	-.267	.037	-.022	-.099	.670
3	MEN73	.425	.028	.123	-.035	.050	-.213	.094	-.170	.075	.409	-.099	.000	-.035	.393	-.051	.624
4	MEN74	.475	.098	.532	-.006	-.056	-.089	.147	.084	.022	-.030	.020	.147	-.198	.004	.056	.624
5	MEN75	.373	-.060	-.016	.084	.030	.084	-.003	-.677	.017	-.042	-.069	.145	-.093	.027	.012	.654
6	MEN76	.353	-.056	.152	-.016	.100	-.108	.813	.145	-.197	.215	-.049	.015	-.063	.060	-.093	.959
7	MEN77	.600	-.017	.651	.020	-.114	.039	.155	.021	.038	.306	.057	.019	-.136	.039	.018	.942
8	MEN78	.272	.070	.248	-.058	.067	.130	.566	-.025	.116	-.171	-.071	-.276	-.100	-.052	-.111	.635
9	MEN79	.600	-.017	.651	.020	-.114	.039	.155	.021	.038	.306	.057	.019	-.136	.039	.018	.942
10	MEN80	.380	-.099	.299	.054	.026	.101	.161	.036	.058	.561	.047	-.037	-.123	-.028	.095	.632
11	MEN81	.455	-.030	.209	-.234	-.081	.168	.024	-.097	.047	.281	.106	-.068	.177	.333	.138	.610
12	MEN82	.305	-.082	.196	-.105	.092	.078	-.223	.022	.091	-.094	.669	.056	.021	.052	.035	.686
13	MEN83	.277	.126	-.078	.064	.136	.053	.065	.014	.031	-.036	.066	-.535	-.087	.425	-.017	.610
14	MEN84	.479	.027	.074	.002	.136	-.197	-.014	.101	-.246	.075	.245	.057	.060	.376	-.005	.578
15	MEN85	.151	.006	.249	.013	.103	-.072	-.103	-.098	.011	.076	-.097	.025	-.768	-.026	.111	.740
16	MEN86	.702	-.089	.345	-.092	.095	-.093	-.090	-.179	.049	-.122	.032	-.012	-.033	.069	.241	.769
17	MEN87	.330	.131	-.053	.173	.164	-.016	-.064	-.326	.140	.133	-.360	-.144	-.025	.064	.047	.491
18	MEN88	.311	.115	.104	.081	.310	-.055	-.160	.385	-.142	.338	-.127	-.042	-.038	-.056	.163	.584
19	MEN89	.535	.231	.289	.018	.113	-.002	-.029	.228	-.062	-.160	-.218	-.140	.101	.061	.208	.642
20	MEN90	-.124	.145	.074	-.012	-.008	-.145	-.260	-.051	.809	.113	.065	-.065	-.037	-.048	.071	.818
21	MEN91	.553	-.012	.041	-.088	.301	.100	-.028	-.217	-.122	-.041	-.108	.099	-.305	-.059	.381	.744
22	MEN92	.472	-.016	.076	-.042	.049	.104	-.160	.041	.121	.099	-.047	-.109	-.035	.070	.578	.650
23	MEN93	.618	.233	-.106	.003	.666	.045	.085	-.010	.020	-.002	.136	-.033	-.044	-.014	.075	.928
24	MEN94	.565	.193	-.079	.030	.137	.178	.344	.005	-.098	-.020	-.163	-.008	.496	.085	.230	.874
25	MEN95	.449	.167	.171	-.136	.327	-.023	-.290	-.101	.017	-.124	.049	.059	.333	.013	-.188	.646
26	MEN96	.355	.072	.044	.151	.397	.020	-.093	.057	.031	.189	.610	.003	.074	.016	-.264	.810
27	MEN97	.627	.211	-.085	-.039	.656	.057	.111	-.017	-.028	.037	.089	.004	-.044	-.021	.078	.911
28	MEN98	.618	.233	-.106	.003	.666	.045	.085	-.010	.020	-.002	.136	-.033	-.044	-.014	.075	.928
29	MEN99	.242	.318	-.046	.123	.137	-.037	.011	.064	.373	-.055	.130	.185	-.008	-.009	.277	.472
30	MEN100	.363	.182	.032	-.067	.281	-.065	.424	-.032	.192	-.009	-.021	.067	.144	-.017	-.066	.502
31	MOT58	.425	-.083	.019	.308	-.038	-.253	.326	-.234	.037	.060	-.017	.168	.147	.007	.070	.570
32	MOT59	.231	.323	-.027	.120	.040	.513	.034	-.190	-.214	.017	.106	.045	-.146	.141	-.004	.575
33	MOT60	.441	.028	.363	.050	-.040	.353	.010	-.175	-.022	.161	.217	.178	.122	-.159	-.004	.632
34	MOT61	.111	.341	-.020	.050	.063	.700	-.138	-.080	-.058	.069	.058	-.062	.023	-.054	.079	.675
35	MOT62	.220	.417	.068	.060	.022	.654	-.008	.032	-.063	.073	-.029	.009	.187	-.058	.105	.719
36	MOT63	.032	.336	-.003	-.082	.003	.045	.001	-.183	-.045	-.088	.117	.658	-.074	.065	-.081	.628
37	MOT64	.498	-.034	.077	.355	.066	-.224	.080	-.099	-.077	-.493	.205	-.016	.013	-.042	.128	.761
38	MOT65	.205	.436	-.051	.673	.043	.076	.016	-.042	.025	.011	-.042	-.061	-.105	.026	-.082	.722
39	MOT66	.250	.410	.132	.501	-.010	.009	-.218	-.080	-.125	-.026	-.152	.104	-.094	.059	-.136	.634
40	MOT67	.044	.779	-.045	.128	.174	.316	.149	.170	.081	-.045	-.095	.278	.015	.023	-.099	.913

41	MOT68	.301	.397	-.024	.188	-.145	.041	-.079	-.042	-.078	-.087	-.032	.027	.055	.492	.095	.584
42	MOT69	.154	.572	.105	.524	-.041	.113	-.098	-.051	.036	.006	-.331	.083	-.005	-.018	-.131	.798
43	MOT70	.367	.067	-.012	.649	-.010	.004	.014	-.012	.070	.331	.017	-.221	.169	-.006	.072	.757
44	MOT71	.049	.763	.034	.150	-.085	.248	-.059	.185	.204	.021	-.034	.204	.068	.275	.010	.880
45	MOT72	.288	.351	-.009	.619	-.062	.145	-.072	.020	-.042	-.097	.114	-.052	-.005	.059	.095	.660
Trace		7.35	3.26	2.20	2.34	2.13	1.91	2.57	1.23	1.22	1.53	1.58	1.29	1.46	1.02	1.07	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 13 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 27
Schmid and Leiman (1957) for Age 15

1	MEN87	.246	.439	-.028	-.014	-.033	-.684	.287	-.026	-.027	.023	.089	.017	-.060	.055	.175	-.035	.854
2	MEN88	.167	.075	-.060	.179	.009	.041	.078	.740	.013	.152	-.067	-.084	.216	.102	-.034	-.060	.721
3	MEN89	.330	.436	-.029	.244	-.069	-.032	-.200	.158	-.011	.001	.052	-.215	.041	.448	-.033	.000	.682
4	MEN90	.352	.113	.000	.030	-.198	-.013	-.093	.038	.036	.157	.603	.154	-.033	-.105	.070	-.044	.620
5	MEN91	-.073	.346	.018	.092	.109	-.112	.807	.043	.108	.139	-.048	.001	-.098	.022	-.094	-.049	.866
6	MEN92	.073	.476	.038	-.117	.111	-.123	.111	-.108	-.195	.054	.083	-.026	-.256	.534	-.152	-.040	.723
7	MEN93	.175	.292	.201	.216	-.013	-.364	-.050	.051	.234	-.062	.106	-.038	-.025	-.039	-.186	.052	.452
8	MEN94	.109	.266	.622	-.298	-.089	-.105	-.043	-.008	-.137	-.049	.151	-.008	.161	-.030	-.040	-.020	.652
9	MEN95	.535	.143	-.012	.090	.117	-.404	.089	.045	-.003	-.216	-.027	-.268	.164	-.060	-.020	.261	.720
10	MEN96	.044	.455	-.089	-.157	-.532	.031	.048	.054	.096	-.069	.098	.125	-.007	.128	-.113	.190	.635
11	MEN97	.155	.278	.032	.217	-.089	-.004	.086	.066	.032	.006	-.035	.151	.226	.621	-.029	-.053	.634
12	MEN98	.185	.356	.114	.002	.011	-.787	-.013	-.018	-.100	.006	-.010	.023	-.017	-.022	.125	.077	.827
13	MEN99	.151	.512	.104	.117	-.185	.122	-.076	-.105	-.129	.159	.056	-.070	-.123	-.051	.081	.518	.717
14	MEN100	.025	.561	.721	.078	-.059	.033	.041	-.028	.163	-.051	.053	-.111	-.045	.069	-.126	-.109	.926
15	MEN101	.340	.423	.348	-.014	.047	.350	.003	.129	-.156	-.022	.040	-.260	-.139	.140	.167	.019	.719
16	MEN102	.000	.406	.209	.029	-.619	-.007	-.153	.068	-.061	.018	.037	.140	.212	-.041	.022	.030	.694
17	MEN103	.033	.376	.329	-.034	-.136	-.159	.334	.088	-.104	.007	-.044	.037	.023	.048	.146	-.346	.573
18	MEN104	.288	.229	.020	-.227	-.013	.106	-.012	.064	-.034	-.228	-.089	.122	.009	.594	.049	.219	.682
19	MEN105	.359	.234	.052	-.021	-.126	-.011	-.058	.722	.046	-.001	.091	.020	-.026	-.018	.013	.048	.743
20	MEN106	.223	.631	.443	.028	-.257	-.244	.008	.108	.028	-.135	-.100	.043	-.097	-.052	.114	.165	.865
21	MEN107	.066	.503	.039	-.097	-.006	-.045	.027	.136	.445	.011	.104	-.227	-.312	.079	.353	.015	.778
22	MEN108	.225	.146	.009	.013	.013	-.212	-.164	-.049	-.006	.010	-.066	-.038	-.101	-.066	.806	-.008	.817
23	MEN109	.089	.471	.422	.275	.085	.039	.101	-.265	.030	.089	-.094	.000	.018	.224	.158	.301	.756
24	MEN110	.041	.414	.514	.017	.098	-.103	-.010	.055	-.061	.089	-.047	-.073	-.092	-.102	-.005	.262	.567
25	MEN111	.033	.346	.051	-.021	-.121	-.177	-.046	.085	-.060	.109	-.074	.239	-.027	.081	-.058	.633	.669
26	MOT63	.394	.012	.049	-.142	.227	-.284	-.111	.041	-.025	.002	.452	-.030	-.082	.109	-.097	-.062	.561
27	MOT64	.323	.150	.030	-.048	-.047	-.095	-.035	-.104	-.669	.095	.053	.041	.062	.081	.047	.160	.653
28	MOT65	.468	-.219	-.010	.104	.193	-.034	-.292	.167	-.533	-.111	-.058	.009	.008	.087	.006	-.033	.738
29	MOT66	.443	.206	-.048	.716	.034	-.051	.138	.120	.076	-.022	-.045	.095	-.093	.037	.002	.051	.821
30	MOT67	.417	.297	.060	-.067	-.079	.021	.478	-.116	.005	-.009	.435	.021	.036	.112	-.164	.016	.750
31	MOT68	.461	.047	-.176	.267	.024	-.337	-.089	-.059	-.154	.037	.216	.125	.011	.112	.173	-.002	.572
32	MOT69	.525	.074	.042	.726	.029	-.003	-.011	.057	-.139	-.062	-.029	.186	-.090	-.035	-.025	.041	.884
33	MOT70	.320	.375	-.101	.151	-.152	-.167	.292	.006	-.342	-.094	-.087	-.217	-.108	-.075	-.078	-.114	.630
34	MOT71	.514	-.115	.120	.223	.134	.199	.198	.218	-.061	-.046	.261	.289	-.120	-.123	-.156	.112	.710
35	MOT72	.500	-.204	.106	.135	.032	.050	-.160	-.024	-.017	-.495	-.039	.070	-.137	-.024	-.006	-.259	.689
36	MOT73	.401	-.207	-.038	.000	.015	.035	-.096	-.092	.086	-.522	-.072	.211	-.230	.104	.077	-.182	.656
37	MOT74	.251	.236	.012	.143	.137	-.035	.103	-.106	.042	-.140	.048	.251	-.717	-.073	.096	.051	.799
38	MOT75	.629	-.346	-.134	-.052	.121	-.026	.141	.155	-.032	-.134	.192	.031	.317	-.021	.431	-.027	.940
39	MOT76	.530	-.130	.099	.364	-.021	.092	-.076	-.210	.044	-.192	.207	-.090	.245	-.034	.076	-.118	.670
40	MOT77	.541	.194	-.126	.111	-.146	.126	.042	.038	-.269	-.108	.167	-.155	-.111	-.080	.001	.027	.555

41	MOT78	.498	.058	.034	.021	-.142	-.102	-.049	-.087	-.013	-.497	-.108	-.037	.072	.076	-.101	.075	.580
42	MOT79	.258	-.064	-.124	.204	-.188	-.026	-.004	-.024	-.027	-.107	.116	.693	-.214	.111	-.009	.107	.740
Trace		4.65	4.37	2.05	1.94	1.19	2.07	1.56	1.50	1.43	1.15	1.17	1.25	1.31	1.50	1.34	1.36	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 14 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 28
Schmid and Leiman (1957) for Age 18

1	MEN97	.315	.287	.082	.039	-.092	.106	-.069	-.147	.032	-.219	-.125	-.252	.118	.135	.514	.030	-.198	.701
2	MEN98	.331	.195	.028	.083	-.076	.101	-.028	.198	-.006	-.013	-.005	.055	-.127	.083	.735	.029	.075	.783
3	MEN99	.518	-.039	.082	.088	.028	.004	.039	-.020	-.043	-.188	.028	-.003	-.310	-.114	.176	-.045	.499	.717
4	MEN100	.284	-.170	.035	.912	-.042	-.004	.050	-.197	.006	.009	-.055	-.004	.110	.048	-.066	.007	-.031	1.009
5	MEN101	.284	-.170	.035	.912	-.042	-.004	.050	-.197	.006	.009	-.055	-.004	.110	.048	-.066	.007	-.031	1.009
6	MEN102	.416	-.112	-.036	.787	-.008	-.040	-.154	.066	-.026	.073	.106	.011	.089	.029	.150	.032	.124	.902
7	MEN103	.174	.147	-.155	.119	.026	.375	.064	.059	.200	.622	-.088	-.099	.002	-.030	.026	-.112	-.024	.698
8	MEN104	.416	-.112	-.036	.787	-.008	-.040	-.154	.066	-.026	.073	.106	.011	.089	.029	.150	.032	.124	.902
9	MEN105	.007	-.017	.020	.308	.058	.039	.067	.143	.023	-.067	.144	-.107	.761	-.128	-.029	-.081	-.149	.787
10	MEN106	.601	-.189	.064	.094	-.010	.184	-.366	-.137	.005	.019	.081	-.033	-.064	-.238	-.053	.000	.189	.704
11	MEN107	.311	-.174	-.008	.078	.128	.507	.084	.078	.025	-.015	.017	.221	-.175	.056	.191	-.076	-.122	.562
12	MEN108	.568	-.054	.046	.072	.143	.319	.058	.069	.063	.018	-.125	-.082	-.056	.163	-.012	.156	.113	.557
13	MEN109	.641	-.058	.020	.050	-.047	.121	.152	-.022	-.080	.125	.055	-.054	-.184	.025	-.058	-.043	.564	.843
14	MEN110	.566	-.051	.095	.052	-.012	.072	-.090	-.103	.129	-.032	-.156	.153	.099	-.026	-.066	.039	.546	.739
15	MEN111	.779	.001	-.006	-.088	-.006	.539	-.013	-.028	-.072	.142	-.066	-.072	.136	.000	.023	-.010	.186	.995
16	MEN112	.310	.078	.105	.048	.207	-.047	.037	.180	.295	-.089	-.034	-.342	.072	.355	-.053	.113	.030	.555
17	MEN113	.694	-.213	.162	-.053	-.081	.334	-.144	-.100	-.069	-.073	.046	.060	.134	.063	-.014	.045	.067	.749
18	MEN114	.643	-.236	.238	.038	-.070	.052	-.463	-.115	-.026	-.081	.113	-.010	-.091	.107	-.143	.032	-.017	.824
19	MEN115	.399	.084	.000	.033	-.098	.087	.077	.064	-.078	.102	.098	-.731	.005	-.054	-.041	-.050	-.079	.769
20	MEN116	.345	.139	.112	.029	-.046	.045	-.084	.182	-.098	.744	-.003	-.078	-.083	.019	-.128	.117	.023	.803
21	MEN117	.567	.012	.479	.039	.072	.013	-.300	.051	-.023	.011	-.010	.041	.013	-.110	-.037	-.060	-.100	.680
22	MEN118	.762	-.002	.030	-.097	-.022	.538	.003	.017	-.064	.124	-.094	-.059	.110	-.061	.044	-.060	.188	.971
23	MEN119	.171	-.009	.124	.051	.039	.084	.347	.159	-.356	-.297	-.074	-.022	.205	-.260	.033	.041	.123	.550
24	MEN120	.764	-.081	.374	-.074	.053	.225	-.024	-.085	.018	.031	.103	-.194	-.046	-.113	.078	.065	.027	.873
25	MEN121	.682	.005	.684	.017	-.009	-.044	.063	.031	.031	-.004	-.037	.004	.007	-.004	.016	-.060	.030	.947
26	MEN122	.731	-.134	.551	-.038	.038	.092	-.001	-.026	.020	-.051	.022	.015	.027	-.013	.051	.147	.027	.898
27	MEN123	.682	.005	.684	.017	-.009	-.044	.063	.031	.031	-.004	-.037	.004	.007	-.004	.016	-.060	.030	.947
28	MEN124	.682	.005	.684	.017	-.009	-.044	.063	.031	.031	-.004	-.037	.004	.007	-.004	.016	-.060	.030	.947
29	MEN125	.638	-.018	.409	-.027	.021	.079	.023	.035	-.051	.081	.038	.102	-.156	.191	.050	.011	.075	.675
30	MEN126	.613	.018	.558	.003	-.019	-.042	-.080	.252	.035	.151	.009	-.025	.064	.086	-.026	-.069	-.031	.803
31	MEN127	.682	.005	.684	.017	-.009	-.044	.063	.031	.031	-.004	-.037	.004	.007	-.004	.016	-.060	.030	.947
32	MOT66	.412	.396	-.022	-.127	.056	.068	.028	-.030	-.649	.017	.054	-.111	-.020	.181	-.013	.010	.046	.825
33	MOT67	-.015	.242	.190	.002	-.028	.033	.061	.043	.085	.014	-.044	.023	-.032	-.069	-.127	-.750	-.047	.699
34	MOT68	.187	-.153	-.062	.141	-.066	.030	-.107	.383	-.265	-.139	-.109	-.192	-.135	.066	-.335	-.085	-.010	.525
35	MOT69	.187	.367	-.093	.094	.100	-.005	.068	.053	-.737	.005	.059	.036	.041	.130	-.035	.008	.003	.773
36	MOT70	-.058	.047	-.117	.202	.044	-.012	.103	-.834	-.015	-.135	-.056	.030	-.187	.017	-.118	.072	.066	.850
37	MOT71	.125	.392	-.094	-.105	-.003	.054	-.087	.153	-.066	-.096	.108	-.059	.223	.121	.096	-.614	.117	.717
38	MOT72	.117	.472	-.011	-.033	.754	.018	-.149	.060	-.135	.003	.099	.082	-.126	-.014	-.042	.056	.012	.887
39	MOT73	.074	.598	.036	-.096	.686	.084	-.004	-.192	-.095	-.001	.024	.023	.200	-.019	-.108	-.036	-.067	.956
40	MOT74	.056	.268	.066	-.075	-.127	.098	-.087	-.002	.065	.051	-.659	-.003	-.146	-.049	.071	.092	-.019	.597

41	MOT75	.015	.367	-.004	-.035	-.081	.072	-.064	.139	-.142	-.005	-.544	.245	.523	.173	-.058	.042	.019	.857
42	MOT76	.006	.376	.050	.037	.031	-.027	-.037	-.036	-.433	.148	-.220	-.105	-.021	-.279	.030	.107	-.157	.533
43	MOT77	.045	.304	-.120	.081	.155	-.068	-.789	.258	.062	.014	-.260	.066	.038	-.190	.120	-.005	-.050	.964
44	MOT78	.059	.609	-.023	.059	.135	-.032	-.059	-.274	.091	.003	-.487	-.060	-.025	-.009	-.044	-.226	.184	.813
45	MOT79	.313	.300	-.001	.099	-.045	.011	.127	-.038	-.217	.055	-.005	.039	-.073	.783	.118	-.022	-.058	.904
46	MOT80	.097	.565	-.021	-.120	.013	-.264	-.035	-.006	-.098	.092	-.092	-.513	.019	.031	.143	.036	.093	.736
47	MOT81	.165	.510	-.013	.018	.074	-.010	-.196	-.151	-.226	-.072	-.196	-.062	-.194	.192	.086	-.216	-.089	.590
48	MOT82	.189	.521	.156	.088	.121	-.080	.104	-.148	-.231	.442	-.008	.038	.052	.110	.069	-.010	-.009	.663
Trace		9.56	3.32	3.33	3.25	1.29	1.48	1.50	1.53	1.78	1.53	1.36	1.30	1.47	1.32	1.24	1.22	1.26	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 15 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

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Table 29
Schmid and Leiman (1957) for **Age 21**

1	MEN107	.587	-.050	.019	.547	-.046	-.045	.238	-.005	-.109	.097	.084	.061	-.007	.069	.063	.030	.061	.753
2	MEN108	.687	-.190	.006	.678	-.021	.054	-.019	.019	-.007	-.021	.055	-.053	.005	.007	.023	.057	.004	.982
3	MEN109	.687	-.190	.006	.678	-.021	.054	-.019	.019	-.007	-.021	.055	-.053	.005	.007	.023	.057	.004	.982
4	MEN110	.687	-.190	.006	.678	-.021	.054	-.019	.019	-.007	-.021	.055	-.053	.005	.007	.023	.057	.004	.982
5	MEN111	.453	-.463	.107	.126	.026	-.122	-.051	-.066	.098	-.354	-.193	.010	.339	-.007	.059	-.113	-.204	.814
6	MEN112	.265	.463	-.095	.064	.144	.509	-.088	-.103	.101	.067	.101	-.186	.125	-.024	-.038	.075	.136	.697
7	MEN113	.697	-.268	.390	.302	.057	-.012	-.020	.114	.147	.021	-.170	-.091	.054	-.058	-.135	-.091	-.023	.910
8	MEN114	.521	-.135	.603	.091	-.030	.000	-.005	-.051	-.015	.008	-.155	-.030	-.116	-.060	-.070	-.076	-.002	.718
9	MEN115	.451	-.106	-.111	.168	.037	.583	.105	-.017	.031	-.056	-.053	.091	-.266	-.135	.045	-.027	-.157	.740
10	MEN116	.310	.194	-.073	.107	-.034	.019	.079	-.098	.223	-.129	.789	-.012	.117	-.105	-.038	-.076	-.024	.890
11	MEN117	.526	.043	.631	-.008	.010	-.053	.063	-.055	.150	.097	.081	.108	-.107	-.033	.071	-.049	.130	.774
12	MEN118	.504	.207	.046	.044	.086	.072	.056	-.204	-.124	.043	-.069	.028	.274	.107	-.032	.210	-.452	.717
13	MEN119	.289	.151	.086	.208	-.071	.010	-.072	-.181	.053	.468	.107	.077	.094	.069	.037	-.046	-.166	.484
14	MEN120	.505	-.136	.009	.020	.084	.593	.013	.049	.156	.083	-.131	.228	-.033	-.177	-.042	-.051	-.130	.788
15	MEN121	.440	.009	.563	.013	-.072	-.003	-.088	-.001	.051	.049	-.096	.299	.091	.064	-.103	.138	.055	.672
16	MEN122	.533	-.122	.221	-.031	-.002	-.123	.081	-.012	.036	-.018	.004	.039	.115	-.183	-.030	.269	-.491	.735
17	MEN123	.496	.130	-.123	.009	.017	.032	.040	.103	-.017	-.119	.136	-.012	.801	-.002	-.158	.055	-.198	1.034
18	MEN124	.339	.252	.116	.100	-.079	.053	-.099	.087	.002	.100	-.060	.051	.069	-.164	.113	.722	-.111	.823
19	MEN125	.518	-.060	.003	-.020	-.047	-.042	.023	.237	.098	.014	.081	-.055	.167	.085	.043	-.059	-.639	.801
20	MEN126	.508	.076	.411	.042	.156	-.088	.026	.081	.009	-.026	.068	-.097	-.116	-.108	-.026	.211	-.060	.562
21	MEN127	.498	.103	.476	-.058	-.081	.110	-.084	-.112	-.029	-.094	.092	.074	-.078	.053	.126	.015	-.220	.624
22	MEN128	.472	.136	.118	.053	.016	.393	-.052	.150	-.295	-.011	.126	.015	.102	.066	.096	-.293	-.010	.651
23	MEN129	.566	.193	.373	-.088	-.109	.251	-.025	-.083	-.008	-.196	.049	-.008	.107	.035	.280	-.005	-.093	.728
24	MEN130	.271	.447	.127	.038	-.166	.484	-.028	.041	-.020	-.156	-.055	-.010	-.007	.195	-.014	.173	.098	.661
25	MEN131	.676	.080	.370	-.004	.069	.127	-.029	-.041	-.048	.092	-.124	.010	.076	-.014	.009	.132	-.389	.825
26	MEN132	.281	.177	.080	.009	.154	.146	.279	-.032	-.517	.080	-.191	-.196	.160	-.138	-.010	-.042	.133	.653
27	MEN133	.456	.171	.329	.002	.076	-.085	-.007	.062	-.143	-.105	.045	-.207	-.135	.021	.005	.228	-.350	.631
28	MEN134	.393	.303	.344	-.029	.035	.074	.129	.004	.099	.158	.053	-.134	-.291	.269	-.194	-.140	-.354	.784
29	MEN135	.527	.415	.274	-.175	.033	.374	.024	.117	-.013	-.102	.337	.021	.144	-.083	-.030	.070	.015	.869
30	MOT70	-.001	.247	-.053	.025	.144	-.081	.013	.086	-.073	-.119	-.155	.063	.013	.689	.072	-.183	-.070	.666
31	MOT71	.262	-.012	.008	.054	.028	-.001	-.075	.022	.001	.057	-.011	.151	-.156	.045	.869	.107	.014	.897
32	MOT72	.482	.048	.005	.036	-.092	-.035	.817	.003	-.035	-.040	.084	.145	.034	-.018	-.039	-.048	-.046	.951
33	MOT73	.471	.063	-.035	.009	-.038	.006	.831	.004	.032	-.073	.035	.112	.020	.027	-.074	-.070	-.071	.956
34	MOT74	.401	-.135	.243	.038	.061	.011	.051	.061	.636	-.292	.006	-.099	-.008	-.013	.065	-.054	.191	.792
35	MOT75	.330	.006	.015	-.050	.078	.100	.002	.030	.703	.099	.235	-.022	.054	-.130	-.082	-.009	-.146	.737
36	MOT76	.245	.277	-.102	-.020	.052	.063	.287	-.023	.416	-.056	-.115	-.107	-.078	.102	.359	.280	-.004	.662
37	MOT77	.245	-.248	.082	-.086	.102	.042	.198	.055	-.060	.089	.002	.787	-.011	.037	.174	.027	.040	.855
38	MOT78	.367	-.181	.058	.129	.314	-.152	-.074	.040	-.079	-.064	.358	.078	-.088	-.123	.261	-.051	-.024	.555
39	MOT79	.454	.022	.074	-.099	.637	-.107	.026	-.015	.127	.129	-.062	-.002	.152	.088	.241	-.125	-.061	.785
40	MOT80	.362	.306	-.055	.022	.621	.161	-.093	.043	.073	.207	.023	.009	.098	.131	-.008	.069	.047	.732

41	MOT81	.269	-.169	-.046	-.051	.723	.130	-.079	-.075	-.025	-.218	-.027	.050	-.120	-.009	-.054	-.079	-.064	.736
42	MOT82	.339	-.019	.007	-.024	-.057	-.033	.080	.845	.057	.110	.021	.070	.147	-.011	-.011	.091	-.029	.893
43	MOT83	.291	-.161	-.100	.079	.002	.076	-.071	.869	.018	-.049	-.133	.007	-.012	.113	.031	.014	-.110	.940
44	MOT84	.239	-.113	.027	.084	.510	-.047	.019	-.017	-.017	-.300	.050	.303	.009	.140	-.216	.113	.137	.622
45	MOT85	.288	-.094	.009	.054	-.003	.069	.060	-.089	.093	-.760	.208	-.062	.150	.125	-.033	-.090	-.001	.792
Trace		9.16	1.89	2.47	2.01	1.90	1.78	1.76	1.77	1.70	1.48	1.32	1.16	1.35	.91	1.35	1.17	1.66	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 15 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 30
Schmid and Leiman (1957) for **Age 24**

1	MEN114	.343	.326	-.099	.449	.074	.044	.009	.063	.271	-.138	-.040	.192	.136	.019	-.056	.001	.007	-.384	.747
2	MEN115	.415	.034	-.011	-.076	-.038	.014	-.159	.076	-.022	.066	-.657	.011	-.108	-.110	-.024	-.004	.144	.011	.694
3	MEN116	.212	.280	-.024	-.072	.047	-.034	-.049	.116	-.077	.007	.182	.155	-.069	.682	-.171	-.012	-.047	.094	.722
4	MEN117	.444	.137	-.025	.676	-.096	-.090	.100	-.015	.067	-.031	-.036	-.107	.041	-.019	-.005	-.101	-.087	-.114	.752
5	MEN118	.327	.296	.114	-.107	-.081	.148	-.035	.057	-.015	-.028	.124	.721	.031	.106	.142	.025	-.020	.032	.823
6	MEN119	.237	-.017	.034	.050	.056	-.186	.002	-.012	.062	-.052	-.089	.104	.719	-.054	-.012	.091	.021	.059	.655
7	MEN120	.516	-.015	.004	-.016	.207	-.041	.003	.093	-.083	.020	-.620	-.181	.220	-.092	.037	.029	.183	-.013	.837
8	MEN121	.327	.270	-.006	.631	.019	-.051	-.069	.002	.051	-.016	.130	-.105	-.008	.181	-.055	-.056	-.037	-.079	.663
9	MEN122	.435	.162	-.045	.061	-.070	.667	-.182	-.063	-.010	-.004	-.011	.153	-.176	.030	-.079	.082	.151	-.009	.800
10	MEN123	.247	.218	.089	-.116	-.013	-.013	.059	-.096	.041	-.019	-.034	.079	.090	-.011	.173	.814	.145	.083	.882
11	MEN124	.393	.405	.006	-.032	.126	.134	.116	-.086	.013	-.075	-.017	.451	.084	.047	-.060	.132	-.159	.007	.640
12	MEN125	.647	.056	-.020	-.122	.023	.334	.078	.008	-.020	.039	-.220	.249	-.027	.114	.038	-.028	-.083	-.019	.691
13	MEN126	.440	.378	-.021	.281	.160	.183	-.098	.138	-.049	.170	.066	.244	.095	.111	.047	-.156	-.099	.013	.656
14	MEN127	.388	.224	.008	.641	-.136	.079	.017	-.055	.042	.151	.069	.011	-.066	-.070	.094	-.032	.131	-.042	.706
15	MEN128	.637	-.123	.069	-.063	-.123	.458	.088	-.092	.327	.047	-.045	.003	.037	.033	-.097	-.204	-.027	.001	.836
16	MEN129	.269	.360	.119	.606	.052	-.023	-.018	-.099	-.064	-.014	.018	-.049	.052	-.201	.000	.031	.153	.051	.675
17	MEN130	.640	-.029	.107	-.071	.063	.081	-.280	-.046	.197	.045	-.282	-.027	.163	.035	.051	.179	-.261	.127	.786
18	MEN131	.348	.461	-.180	.257	.092	.150	-.086	-.019	.093	.030	-.181	.354	.135	.049	-.095	.207	.131	-.254	.792
19	MEN132	.225	.120	.101	.116	-.119	-.357	-.002	-.182	.094	.020	-.173	.243	-.362	.212	.108	-.004	.105	.046	.563
20	MEN133	.441	.287	.076	.214	-.057	.518	.051	.142	-.139	-.004	.054	.183	-.182	-.098	.067	.039	.115	-.108	.753
21	MEN134	.592	.255	.017	.162	.019	.146	.023	-.060	-.096	.068	-.267	.033	.025	-.097	-.087	.031	-.160	.230	.652
22	MEN135	.744	.278	.015	.338	.032	.178	.075	-.003	-.053	.056	-.173	-.028	-.068	.030	.021	-.025	-.041	.224	.879
23	MEN136	.300	.446	.120	.438	.118	.137	-.018	-.095	-.177	-.088	-.002	-.010	-.008	-.101	-.250	-.040	-.105	.001	.662
24	MEN137	.671	-.043	.152	-.011	-.062	.246	.058	-.147	.166	-.032	-.122	.118	-.049	-.082	.050	-.223	-.125	.276	.774
25	MEN138	.298	.351	.105	.134	-.099	-.102	-.025	.170	.058	.090	-.137	-.140	-.342	.134	-.159	.201	-.311	-.068	.642
26	MEN139	.538	.195	.094	-.042	.017	.140	.054	-.009	-.086	.003	-.096	.018	-.043	.480	-.144	.044	.313	.093	.739
27	MEN140	.593	-.054	.124	.099	-.146	.210	.134	-.047	.160	.146	-.007	-.227	.232	.034	-.032	.147	.055	.108	.656
28	MEN141	.748	.203	.464	.085	.040	.045	-.012	.134	.044	-.169	-.056	.002	.023	.044	.120	.049	.014	.172	.927
29	MEN142	.395	.165	.661	-.044	.050	.016	-.088	-.078	-.028	.143	.028	-.014	-.047	.034	-.081	.035	-.034	-.207	.716
30	MEN143	.748	.203	.464	.085	.040	.045	-.012	.134	.044	-.169	-.056	.002	.023	.044	.120	.049	.014	.172	.927
31	MEN144	.840	.134	.237	.165	-.004	.089	.095	.103	.048	-.026	-.087	.010	.042	.152	.144	-.021	.024	.178	.924
32	MEN145	.606	.298	.669	.019	-.009	-.006	.074	.013	-.046	-.096	-.008	.055	-.014	-.014	-.059	.017	.038	.069	.934
33	MEN146	.602	.253	.691	.005	-.002	-.019	.031	-.008	-.010	-.059	-.002	.057	.022	-.019	-.051	.000	-.001	.034	.917
34	MEN147	.590	.247	.706	-.003	-.003	-.017	.074	.002	-.021	-.063	.009	.041	.011	-.033	-.059	.012	-.040	-.013	.926
35	MEN148	.223	.172	.543	-.082	.054	.032	-.069	-.025	.083	.231	.088	-.025	-.008	-.027	-.045	.123	-.023	-.276	.554
36	MOT75	.280	.267	-.027	.068	-.174	-.018	.131	.096	.621	-.087	.123	.063	.146	.034	-.053	.321	.007	-.026	.753
37	MOT76	.250	.100	.014	.010	.059	.050	-.152	.031	.720	.204	-.037	-.035	-.049	-.139	.114	-.069	-.023	-.009	.705
38	MOT77	-.039	.309	.065	.039	-.103	.083	.002	-.077	-.098	.000	.008	-.094	.052	.210	-.661	-.172	.056	-.001	.662
39	MOT78	.092	.342	-.097	-.008	-.093	.055	.002	.157	.143	.701	-.095	-.005	-.023	-.099	-.012	.059	.113	.123	.734
40	MOT79	.159	.537	.019	.000	.697	-.059	.101	.028	-.038	.018	-.036	.079	.083	.022	.037	-.038	-.068	.020	.838

41	MOT80	.100	.461	.045	-.049	.755	-.103	.005	.005	-.041	.005	-.134	-.063	.055	.009	.008	-.029	-.061	.009	.839
42	MOT81	.248	.153	-.113	.029	.159	.037	.208	-.102	.061	.709	-.011	-.076	-.057	.151	.028	-.130	-.057	-.008	.737
43	MOT82	.202	.448	.082	-.035	.011	-.017	.028	.802	.000	.020	-.112	.041	.010	.069	.006	-.104	.041	-.093	.934
44	MOT83	.055	.420	-.007	-.049	.016	-.023	.067	.850	.084	.039	-.023	.008	-.022	.053	.065	-.013	-.020	-.186	.961
45	MOT84	.117	.356	-.021	.144	.345	.008	-.094	-.035	.013	.100	.205	-.052	-.117	.210	.153	.194	.057	.204	.509
46	MOT85	.277	.166	-.020	-.148	.059	-.019	.061	-.216	-.023	.083	-.058	.010	.102	.137	-.054	.115	.170	.612	.639
47	MOT86	.017	.544	.159	.058	-.006	-.183	-.040	.123	.078	.264	.048	.291	.238	-.045	-.190	-.199	.181	.223	.754
48	MOT87	.246	.312	-.026	.008	-.070	-.116	.501	.018	-.290	.420	-.067	.190	.005	-.018	.018	.172	-.189	.030	.796
49	MOT88	.075	.213	-.003	.049	-.078	.076	.053	.021	.001	.014	-.151	-.048	.005	.065	-.058	.145	.821	.111	.809
50	MOT89	.387	.116	.105	.049	-.006	-.100	.670	.042	-.155	.084	.024	-.055	.113	.165	-.027	-.088	.137	.028	.741
51	MOT90	-.114	.616	-.041	-.003	.176	-.145	.002	-.039	.315	-.033	.122	.087	-.080	.048	-.273	.021	-.001	.317	.754
52	MOT91	-.002	.579	-.014	-.114	.244	.103	.174	.128	.119	-.062	-.085	-.137	-.322	.028	-.326	-.071	.150	.160	.774
53	MOT92	.158	.257	.105	.038	.278	.007	.459	-.096	.211	.013	.021	.027	-.206	-.124	.103	.011	.103	-.263	.595
54	MOT93	.116	.458	-.052	-.045	.041	.072	.659	.096	.093	.093	.190	-.028	-.066	-.151	-.046	.153	-.025	.260	.853
Trace		9.42	4.92	2.92	2.60	1.68	1.67	1.76	1.79	1.64	1.62	1.46	1.51	1.35	1.22	1.06	1.34	1.42	1.51	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 16 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 31
Schmid and Leiman (1957) for Age 27

1	MEN123	.161	.110	-.019	.022	.087	-.177	.079	.114	.000	.087	-.117	-.095	.079	.086	-.114	-.754	.072	-.021	.728
2	MEN124	.137	.404	.067	-.127	-.225	.096	.051	-.019	-.080	-.046	.017	.207	-.046	-.144	-.156	-.443	-.254	.187	.660
3	MEN125	.386	.388	-.059	-.007	-.008	.047	-.091	.125	-.114	-.127	.072	.080	.468	.149	.017	-.159	.007	-.206	.679
4	MEN126	.350	.330	-.074	.009	-.545	.192	-.049	.049	-.113	.143	.031	.040	.007	-.166	.123	-.047	-.078	.124	.678
5	MEN127	.145	.504	.108	.068	-.372	.307	.107	-.058	.234	.136	-.006	-.008	-.035	-.053	.067	-.008	.137	.033	.640
6	MEN128	.517	.244	-.014	.068	-.135	.015	.057	.064	.043	-.018	.082	-.091	-.041	.012	-.057	-.037	-.705	-.166	.906
7	MEN129	.486	.448	.155	.166	-.242	-.055	.084	-.143	.170	.030	-.027	-.047	-.010	.074	-.150	.038	.049	-.161	.669
8	MEN130	.324	.411	.180	-.082	-.284	-.147	-.139	.040	.091	-.160	.229	.128	.035	-.042	-.042	.169	-.002	-.153	.595
9	MEN131	.081	.447	-.073	.207	.006	.243	.002	-.034	.046	.007	.402	-.044	.018	.067	.140	-.392	-.023	-.232	.712
10	MEN132	.250	-.117	.028	-.034	-.035	-.222	-.163	.237	-.101	.049	.143	-.061	.269	-.181	.103	-.354	.028	-.041	.491
11	MEN133	.507	.199	-.090	-.057	-.586	-.025	-.051	.074	-.086	.043	-.065	-.050	-.051	-.037	.042	.098	-.123	.244	.767
12	MEN134	.217	.285	.062	-.002	-.031	.753	-.033	.077	-.281	-.026	.092	-.056	.017	-.007	-.088	.134	-.047	.034	.827
13	MEN135	.630	.420	-.058	-.067	-.518	.001	-.061	.012	.036	-.002	.092	-.031	.013	.072	-.047	.010	-.172	.064	.905
14	MEN136	.501	.496	.194	.046	-.304	-.173	-.009	-.152	.066	-.094	-.116	-.093	-.120	-.039	-.169	-.220	-.086	-.074	.823
15	MEN137	.472	.280	.069	.046	-.168	-.014	.124	.111	-.097	.054	.024	-.054	-.067	.045	.117	.087	-.639	-.093	.824
16	MEN138	.499	-.031	.056	.199	-.146	-.212	.095	.098	.083	.017	-.105	.062	.491	-.058	.018	.174	-.057	.138	.697
17	MEN139	.580	.064	-.016	-.224	-.100	.144	-.012	.080	-.108	-.033	.075	-.252	.233	.124	-.134	.076	-.087	-.022	.612
18	MEN140	.425	.237	.045	-.031	-.144	.033	-.104	-.059	-.193	.473	.113	.227	-.092	.302	-.010	.079	.031	-.148	.730
19	MEN141	.671	.511	.263	.125	-.208	.036	.033	-.146	-.200	-.014	-.089	-.017	.182	.021	.020	.032	-.093	.032	.956
20	MEN142	.366	.150	.406	.035	.016	.074	.088	.668	-.153	.065	-.091	-.067	-.101	.000	-.139	-.045	.021	-.111	.867
21	MEN143	.208	.191	.108	-.053	-.030	-.035	-.139	.612	.227	-.096	-.030	.068	-.004	.283	.032	-.048	-.187	.069	.679
22	MEN144	.440	.298	.060	.074	-.064	.163	.052	.065	-.750	.045	-.060	.014	.009	.076	.025	-.055	-.003	-.049	.910
23	MEN145	.480	.435	.634	-.096	-.004	-.008	-.021	.059	-.072	.062	.028	-.026	.079	-.025	.058	.021	.043	-.017	.857
24	MEN146	.439	.441	.651	-.127	-.007	-.010	-.029	.127	-.021	.035	.032	-.021	.066	-.020	.052	.044	.061	-.029	.862
25	MEN147	.333	.356	.249	-.074	.116	.046	-.006	-.053	-.010	-.047	.072	.042	-.077	.416	.048	-.034	-.248	.270	.649
26	MEN148	.350	.302	.223	.083	-.160	-.210	-.010	.184	-.182	-.107	.136	-.093	-.154	.252	.065	-.122	.440	.215	.792
27	MEN149	.563	.481	.509	-.007	-.078	-.023	-.008	-.033	-.122	-.095	-.003	-.059	.130	-.055	.019	.024	-.035	.009	.865
28	MEN150	.645	.526	.288	.095	-.175	.066	.028	-.138	-.204	-.014	-.102	-.001	.151	.029	.012	.045	-.156	.012	.942
29	MEN151	.380	.395	.227	.240	.066	.164	.011	-.071	-.627	-.130	-.057	.091	.048	.062	.032	.057	.001	.022	.878
30	MEN152	.453	.344	.677	-.079	.056	.037	-.040	.238	.077	.070	-.009	-.050	.021	-.032	-.018	-.008	-.043	-.008	.869
31	MEN153	.453	.344	.677	-.079	.056	.037	-.040	.238	.077	.070	-.009	-.050	.021	-.032	-.018	-.008	-.043	-.008	.869
32	MEN154	.366	.150	.406	.035	.016	.074	.088	.668	-.153	.065	-.091	-.067	-.101	.000	-.139	-.045	.021	-.111	.867
33	MOT78	.293	.032	-.049	-.037	-.034	.155	.119	-.136	.057	-.031	.835	-.151	.032	.029	-.070	-.018	-.033	.025	.882
34	MOT79	.413	-.044	-.096	.763	-.020	.013	-.115	.039	-.125	.012	.138	-.039	-.042	-.083	-.033	-.011	-.064	-.142	.849
35	MOT80	.410	-.067	-.082	.822	.034	.043	-.219	.021	-.147	-.103	-.023	.008	.033	.016	-.024	.018	.029	.106	.954
36	MOT81	.156	-.441	.081	.161	.037	-.019	-.164	-.018	.047	.084	.446	.050	-.100	-.067	-.125	.089	.106	.397	.698
37	MOT82	.490	-.178	.004	.016	.032	-.013	.018	.071	.011	-.079	.166	.064	-.025	.007	-.751	-.094	-.076	.019	.897
38	MOT83	.323	-.108	.018	.106	.014	.135	-.043	.110	.041	-.069	.005	.205	.048	-.120	-.800	-.048	.100	-.083	.884
39	MOT84	.537	-.200	-.097	-.127	-.010	-.118	-.309	-.276	-.159	.160	-.052	-.050	.004	.171	-.312	-.022	-.082	-.021	.729
40	MOT85	.206	-.105	-.085	-.008	-.189	.042	-.006	-.080	.029	-.078	-.004	-.062	.138	.164	.075	.001	.173	.725	.723

41	MOT86	.475	-.106	-.100	.454	.010	-.118	.062	-.006	.015	.122	-.034	-.113	.008	.107	-.096	-.243	-.204	.112	.634
42	MOT87	.381	-.189	.017	.171	.051	-.179	.347	.029	.040	.104	.605	.038	.171	.056	-.109	.173	-.128	.047	.839
43	MOT88	.445	.067	.161	-.082	.113	.110	.050	-.250	-.040	.079	.124	-.013	.635	-.024	-.034	-.123	.119	.164	.810
44	MOT89	.464	-.024	.181	.069	-.013	.010	.056	-.011	.047	-.067	.132	-.718	-.050	-.039	.237	-.106	-.099	.034	.879
45	MOT90	.264	-.228	-.009	.163	-.055	.011	-.824	-.039	-.007	.017	-.163	.024	-.045	-.033	-.052	.067	.163	.021	.898
46	MOT91	.266	.061	.027	-.092	-.112	-.020	.159	.102	.051	.642	-.060	.207	.165	.216	.049	-.184	.073	.043	.711
47	MOT92	.319	.000	.123	.242	.024	.068	-.547	.354	.188	.033	-.138	.092	.058	.107	.070	.034	-.140	.027	.710
48	MOT93	.580	-.170	.091	.151	-.023	-.002	-.315	-.118	.164	.178	.006	-.122	.288	-.034	-.121	-.061	.083	.075	.699
49	MOT94	.389	.092	-.144	.008	.067	-.017	.029	.156	-.107	.179	.009	-.032	.043	.619	.054	-.041	.013	.091	.653
50	MOT95	.418	-.182	-.091	.011	-.097	.314	-.018	.196	.101	-.034	.037	-.333	.048	.101	-.235	.077	.058	.206	.606
51	MOT96	.407	-.369	.109	.030	.015	-.007	-.246	-.051	.027	.573	.059	-.199	-.083	-.018	.105	.045	-.135	-.108	.800
Trace		8.84	4.56	2.99	2.03	1.66	1.31	1.67	2.07	1.66	1.31	1.79	1.10	1.37	1.13	1.74	1.45	1.64	1.34	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 16 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 32
Schmid and Leiman (1957) for Age 30

1	MEN131	.277	.063	-.006	.070	-.004	.675	-.038	-.176	.081	.081	-.065	-.026	.017	.065	.012	-.117	.073	-.072	.015	.621
2	MEN132	.360	.393	.060	.036	-.070	-.049	-.163	.133	.098	.176	-.095	-.085	-.349	-.158	.069	-.198	.060	.116	.034	.606
3	MEN133	.235	.220	.079	.059	.050	.161	.313	.040	-.001	-.158	.130	.043	-.040	-.118	-.260	.071	-.043	.132	-.368	.529
4	MEN134	.274	-.149	-.049	.022	.011	.068	.821	.034	-.082	.010	-.104	-.129	.035	-.108	-.104	.068	.198	.088	-.027	.891
5	MEN135	.489	-.254	-.056	.261	-.133	.086	.053	.015	.030	.029	-.081	-.147	-.074	.234	.014	.002	.274	.146	-.086	.597
6	MEN136	.343	.230	.279	-.009	.060	.128	-.175	-.029	-.094	-.043	-.143	.324	-.241	-.103	-.306	.109	.114	.008	.159	.649
7	MEN137	.431	-.080	.196	.022	.011	-.113	.036	.062	.028	.138	.006	-.059	.082	.066	.087	-.108	-.117	.196	-.719	.871
8	MEN138	.206	.453	.016	.052	.078	-.052	.058	.058	-.250	.109	.085	-.377	-.260	-.134	-.008	-.064	-.215	-.002	.343	.744
9	MEN139	.364	-.157	.117	.015	.001	.357	.092	-.171	-.178	-.014	-.252	-.047	.087	.248	.070	.085	-.075	.052	.003	.524
10	MEN140	.442	-.322	.283	.062	.067	.015	.328	-.196	.033	-.035	.097	.101	-.231	.120	.012	-.166	-.128	-.045	-.031	.670
11	MEN141	.461	-.051	.346	-.020	-.021	-.088	-.103	.070	.066	-.011	.050	.088	.096	.167	.086	.195	.129	.129	.441	.684
12	MEN142	.355	.290	.219	-.035	-.144	.659	.149	.054	.122	.067	.218	.178	.120	-.062	-.085	-.142	-.070	-.091	.059	.900
13	MEN143	.250	.575	-.064	.027	.107	.223	-.261	.080	-.090	.005	-.162	.212	.032	.086	-.064	.094	-.521	.213	.097	.960
14	MEN144	.277	.140	-.037	.076	.123	-.106	-.022	.602	-.056	-.055	.036	.116	.105	.104	.113	-.086	.122	-.044	-.043	.574
15	MEN145	.421	.121	.251	-.057	.017	-.186	-.005	-.075	-.003	-.006	-.047	.003	.024	.015	.084	.163	.070	.535	-.171	.656
16	MEN146	.764	.153	.415	.021	-.136	.168	.143	.122	.028	.098	-.108	-.056	-.008	.000	.157	.067	-.030	.101	-.050	.929
17	MEN147	.409	.222	-.075	-.001	.081	-.003	.133	-.107	-.016	-.020	-.079	.091	-.140	.072	-.035	.069	.041	.638	-.090	.720
18	MEN148	.325	.165	.657	-.031	.077	.067	-.136	-.122	-.039	-.164	-.092	-.058	-.031	-.105	-.059	-.171	-.014	-.053	.027	.698
19	MEN149	.484	.072	-.084	-.068	.093	.230	-.045	-.030	-.056	.627	.196	.003	.020	-.093	.110	.201	.067	.073	-.079	.828
20	MEN150	.389	-.133	-.007	-.012	.143	.039	.061	.000	.009	.582	.043	.028	.081	-.042	.203	-.216	-.074	-.075	.023	.644
21	MEN151	.432	.046	.051	-.065	-.069	-.084	.159	.464	.067	.042	-.227	-.002	-.080	.095	.131	.350	-.023	-.221	.098	.720
22	MEN152	.358	.130	.071	.126	.096	.026	.020	-.015	.228	-.106	-.800	.015	-.123	-.015	.006	-.203	.014	.124	-.030	.952
23	MEN153	.770	.213	.428	.045	-.044	.302	.095	.065	-.028	.068	-.100	-.123	-.037	-.004	.070	.013	-.008	.038	-.026	.968
24	MEN154	.737	.253	.373	-.027	.033	.241	.059	.108	.040	.062	-.172	-.022	-.006	.049	.019	.015	-.073	.093	-.043	.876
25	MEN155	.370	-.190	.448	.045	.180	-.151	-.083	-.001	-.194	.023	.293	.145	.012	-.029	.110	.079	.006	-.048	-.261	.672
26	MEN156	.462	.093	.028	.037	.867	-.073	.005	.042	.086	.052	-.084	-.039	.031	.036	-.036	-.061	.039	.041	.003	.999
27	MEN157	.587	.174	.154	-.144	.531	.149	.065	.088	-.079	.196	.022	-.091	-.005	.042	-.028	.035	.076	.032	-.029	.799
28	MEN158	.462	.093	.028	.037	.867	-.073	.005	.042	.086	.052	-.084	-.039	.031	.036	-.036	-.061	.039	.041	.003	.999
29	MOT84	.259	-.114	.091	.095	-.055	-.012	-.115	.114	.045	.121	.003	.263	-.124	-.112	.894	-.004	.010	.018	-.055	.999
30	MOT85	.080	-.054	-.079	-.093	.081	.108	-.040	-.060	.885	.043	-.224	.173	-.044	.011	.082	-.172	.179	.005	.046	.986
31	MOT86	.253	-.021	-.048	.080	-.066	-.121	.031	-.004	-.130	.007	.239	.068	-.060	.004	-.037	.889	.029	.147	.122	.999
32	MOT87	.045	-.110	-.035	.079	-.066	.045	-.093	.073	.125	.022	-.028	.844	.058	-.034	.263	.061	-.161	.072	.027	.880
33	MOT88	.340	-.113	-.016	.142	-.129	.069	-.215	-.111	.061	.307	.451	-.034	-.013	.217	-.223	-.084	-.033	.100	.017	.647
34	MOT89	.349	.220	.112	-.048	-.144	-.161	-.032	-.048	.016	-.104	-.198	-.140	-.695	.042	-.082	.024	-.067	.126	-.033	.818
35	MOT90	.163	-.219	-.034	.075	.000	-.135	.046	.118	-.205	.045	-.505	.104	.096	.262	-.155	-.286	-.095	-.006	.064	.622
36	MOT91	.432	-.204	-.036	.597	.062	-.041	.006	-.211	-.008	.148	-.295	.053	-.014	-.175	.161	.136	-.096	.011	-.021	.833
37	MOT92	.315	.369	.011	.048	.084	-.009	-.097	.342	.517	-.103	.079	-.085	-.020	.053	-.059	.103	-.179	-.041	-.199	.753
38	MOT93	.352	-.189	-.065	-.133	.097	.043	-.135	.155	.050	-.122	.010	-.027	-.098	.655	-.114	.028	-.065	.055	-.020	.714
39	MOT94	.190	-.184	-.048	.086	.126	.034	.115	.109	.094	-.014	-.002	-.083	.069	-.044	-.029	.067	.795	.094	.196	.830
40	MOT95	.331	-.046	.092	.685	-.025	.062	-.041	.125	-.112	-.245	-.037	.013	.157	-.103	.191	-.057	.122	-.004	.046	.778

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41	MOT96	.366	-.144	.120	.217	.013	.157	-.346	.078	-.079	.031	.042	-.195	-.136	.177	-.001	.024	.159	-.286	-.108	.583
42	MOT97	.234	-.092	-.049	-.124	-.104	-.012	.136	.168	-.166	.075	.027	.282	-.427	.068	.151	-.123	.168	.049	-.082	.514
43	MOT98	.519	-.145	-.146	.471	.045	.021	.093	.157	-.063	.072	-.122	.202	-.110	.041	-.120	.077	-.023	-.080	-.111	.688
44	MOT99	.389	-.016	-.076	.014	.133	.045	.016	-.123	.112	-.071	.099	.014	-.758	.119	.295	.209	-.082	-.050	.140	.968
45	MOT100	.499	-.141	.063	.344	.057	-.056	.197	.033	.130	.042	.134	.032	.008	.039	-.206	.138	.100	-.039	.445	.748
46	MOT101	.237	-.162	.068	-.018	-.062	-.123	-.002	-.080	.125	.399	-.288	.022	.074	-.091	-.310	.180	-.013	-.113	-.177	.558
Trace		7.38	1.96	1.73	1.47	2.11	1.62	1.47	1.14	1.52	1.35	1.95	1.50	1.76	.98	1.65	1.60	1.40	1.15	1.53	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 17 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 33
Schmid and Leiman (1957) for Age 36

1	MEN140	.400	.029	-.104	-.161	.774	.069	.026	-.026	.087	.123	.056	.067	-.005	-.081	.026	-.053	-.027	.002	.844
2	MEN141	.323	.108	.351	.155	.259	-.095	.075	-.036	.290	.007	-.158	-.022	-.005	-.024	.173	-.070	-.051	-.034	.495
3	MEN142	.489	-.227	.040	-.009	.266	.137	-.106	.247	-.206	-.032	.075	-.184	-.106	.171	-.262	.105	.044	.028	.660
4	MEN143	.398	.034	.071	.225	.086	-.005	.119	-.174	.005	.037	-.064	.194	-.114	.102	-.039	-.006	.011	.588	.681
5	MEN144	.475	-.057	-.122	-.046	.732	-.039	.051	.016	.089	.090	.120	.039	-.011	-.045	-.026	-.023	.001	.081	.828
6	MEN145	.396	.059	.023	-.045	-.051	-.044	-.043	.012	-.064	.013	.358	.221	-.128	-.020	.051	.018	.335	.384	.631
7	MEN146	.361	.257	.256	-.057	.042	-.126	.123	-.080	-.086	-.102	.727	-.073	.163	.145	.040	.117	-.031	.078	.927
8	MEN147	.484	.151	.060	.070	.014	-.027	-.060	-.050	.023	-.020	.141	-.201	.035	-.047	.012	-.020	-.011	.593	.690
9	MEN148	.262	.029	.225	-.186	.056	-.019	.087	.387	.335	.009	-.109	.019	-.153	.056	-.070	.174	-.044	.003	.504
10	MEN149	.513	.066	.044	.224	.120	-.293	-.045	-.036	-.138	-.103	-.226	-.129	-.033	-.314	.094	.186	.024	.211	.708
11	MEN150	.633	-.463	.174	.071	.233	-.054	-.095	.126	-.262	-.174	-.108	-.029	.204	-.036	-.130	.051	.123	.111	.933
12	MEN151	.369	.255	.302	-.007	.016	.412	-.183	.107	.075	.066	.096	-.006	-.121	.143	-.065	.022	.045	.050	.571
13	MEN152	.124	.610	.281	-.222	.034	.243	-.041	.008	.078	.046	.107	-.075	-.065	-.144	-.047	-.111	-.171	.221	.721
14	MEN153	.404	-.069	.200	-.077	.013	-.070	.091	.294	-.070	.299	-.123	.413	.126	.097	.077	.058	.005	.038	.630
15	MEN154	.284	.125	.111	.089	.061	.149	-.215	-.010	-.026	.072	.028	.704	.120	-.142	.169	.015	.153	.055	.781
16	MEN155	.423	.047	.651	-.054	.002	-.023	.154	.052	.020	-.061	.104	.025	-.088	.072	.080	-.163	.252	-.062	.764
17	MEN156	.348	.480	.217	.155	.105	-.028	-.064	-.031	-.146	.378	.114	-.016	-.089	.000	-.099	.073	-.068	.029	.645
18	MEN157	.279	.277	.557	.035	.047	-.078	.036	-.067	.134	-.084	.368	-.028	.131	-.068	-.148	-.019	.057	-.054	.691
19	MEN158	.478	.300	-.110	.305	.012	.062	.048	.362	-.131	.240	.123	.065	-.032	.062	.195	.028	-.142	.040	.721
20	MEN159	.337	.444	.186	-.016	.111	-.079	.050	.191	-.013	-.013	.593	.124	.061	-.070	.027	.074	-.062	-.067	.793
21	MEN160	.041	.357	.365	-.023	-.058	.073	-.074	-.121	-.022	.059	.013	.340	.022	-.088	-.113	.046	-.051	.051	.439
22	MEN161	.320	.129	.197	-.028	-.036	-.024	-.080	.704	-.102	-.028	.047	.079	.037	-.246	-.077	-.174	-.048	-.115	.795
23	MEN162	.621	.229	.645	.042	-.068	.080	.089	.152	-.074	-.074	.172	.098	.061	.031	.004	.034	.072	.006	.959
24	MEN163	.385	-.096	.251	-.073	-.014	.055	-.021	-.109	.070	.038	-.065	.045	-.206	-.191	.078	-.016	.662	-.026	.778
25	MEN164	.379	.400	.278	.225	.017	.030	-.096	-.026	.010	.227	.168	-.009	-.087	.129	.111	.218	-.011	-.183	.640
26	MEN165	.572	.283	.546	.061	-.134	-.117	-.162	.118	-.076	.247	-.022	-.103	.027	-.055	.039	.065	.100	.040	.879
27	MEN166	.634	.288	.541	-.023	-.127	-.075	-.014	.217	-.009	.145	.063	-.012	.059	-.020	.120	.137	.060	.008	.913
28	MEN167	.402	.253	.207	-.266	-.167	.004	.079	.122	.170	-.031	-.038	-.081	-.012	-.059	-.009	.493	-.053	.186	.710
29	MEN168	.217	-.005	.138	-.018	-.025	-.154	-.009	-.111	.089	.301	-.072	-.677	.100	.038	-.145	.190	.062	-.089	.745
30	MOT91	.214	.086	.064	.033	-.015	-.136	.051	-.071	.225	-.067	.058	.206	-.018	.080	.804	-.040	.079	-.001	.846
31	MOT92	.428	-.011	-.105	-.003	.023	.027	.083	.012	.047	.091	-.011	.209	.111	-.001	-.004	.030	-.025	.683	.737
32	MOT93	.250	-.010	-.063	.037	-.011	-.013	-.102	.176	.268	.045	.176	-.059	.577	-.137	.059	.055	-.165	.102	.613
33	MOT94	.076	.057	.002	-.062	.109	.228	-.049	-.084	.795	-.161	-.068	-.078	-.026	.004	.187	.253	.043	.018	.856
34	MOT95	.135	.189	-.076	.101	-.015	.768	-.092	.058	.146	-.062	-.094	.147	.038	-.012	-.106	.052	-.018	-.001	.743
35	MOT96	.226	.045	-.005	.765	-.136	-.043	-.019	-.089	-.128	-.135	-.015	.113	-.034	.070	-.022	.118	-.081	.087	.749
36	MOT97	.429	.095	.040	.515	.034	.228	.033	.118	.299	.078	-.088	-.109	.118	-.043	.122	-.132	.031	.049	.694
37	MOT98	.457	.283	.318	-.013	.048	.305	.052	.058	-.303	-.184	-.107	.119	-.014	.009	.325	.022	-.148	-.061	.774
38	MOT99	.144	.207	.005	-.161	.117	.025	.051	.013	-.091	.816	-.112	-.063	.065	.070	-.082	-.181	.034	.066	.851
39	MOT100	.222	-.009	.118	-.028	-.016	.151	.131	-.151	-.216	.044	.099	.109	.654	-.081	-.062	.090	-.138	-.055	.665
40	MOT101	.196	.141	.012	-.096	.070	.001	-.064	.175	.025	-.104	-.061	.172	.213	-.612	-.075	-.033	.156	-.021	.603

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100

41	MOT102	.180	.216	.044	-.021	.019	-.009	.834	-.089	-.108	.015	.099	.021	.017	-.007	.025	-.027	-.043	.098	.820
42	MOT103	.278	.050	.019	.020	.062	-.134	.851	.002	.046	.012	.094	-.194	.022	.045	.101	.028	.015	-.012	.890
43	MOT104	.211	.311	-.086	.201	.088	-.081	.152	.189	.056	-.087	.059	.245	-.167	-.347	-.207	.331	.043	-.115	.652
44	MOT105	.517	.174	.011	.057	-.022	.170	-.004	.078	.144	-.233	.149	-.062	.042	-.029	.077	.579	-.023	-.028	.782
45	MOT106	.217	.363	.041	.113	-.098	.302	.389	.092	-.090	.160	-.138	-.095	-.002	-.223	-.237	.009	.013	-.005	.622
46	MOT107	.458	-.014	.071	.405	-.094	.341	.270	.037	.074	-.064	-.028	-.092	.066	-.022	-.073	-.034	.196	.088	.655
47	MOT108	.244	.083	-.053	-.098	.068	.625	.016	-.228	.098	.126	-.118	.151	.173	.042	.021	.251	.107	-.051	.698
48	MOT110	.465	.354	-.134	-.150	.048	.128	.116	-.038	-.237	.126	.131	-.193	-.012	-.273	.228	.211	.205	-.056	.759
49	MOT111	.379	.115	-.025	.142	.007	.110	-.047	-.236	.164	-.033	.083	-.035	.122	.038	-.105	.691	-.007	.000	.789
Trace		6.94	2.68	2.92	1.70	1.55	1.99	2.00	1.47	1.67	1.53	1.64	1.87	1.21	1.06	1.35	1.72	.96	1.62	

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 16 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Table 34
Schmid and Leiman (1957) for Age 42

1	MEN146	.553	.200	.527	.134	.017	-.064	-.004	-.047	-.111	-.138	-.140	.045	.005	-.002	.066	.053	-.167	.104	.747
2	MEN147	.452	.023	.653	-.076	.095	.059	-.002	.035	.095	-.001	.072	-.015	.097	.039	-.073	-.172	-.124	-.146	.747
3	MEN148	.537	.044	.638	-.076	.137	.121	-.096	.087	-.008	-.050	.032	-.060	.018	.131	.068	-.039	-.012	-.065	.789
4	MEN149	.262	-.161	.145	-.162	-.021	.130	.241	-.113	.085	-.036	.090	.041	-.080	-.054	.074	.032	-.007	-.638	.671
5	MEN150	.377	-.245	.026	-.106	-.063	.204	-.148	-.066	.029	-.214	.036	-.280	-.031	-.094	.086	-.039	.291	-.286	.598
6	MEN151	.530	.037	.662	-.071	.106	.088	-.098	.074	.036	-.042	.068	-.038	-.021	.098	.048	-.075	-.022	-.107	.799
7	MEN152	.530	.186	.179	-.003	-.081	-.012	.109	-.110	-.056	-.096	.114	-.054	.457	-.154	-.114	-.095	.125	.081	.684
8	MEN153	.405	-.141	.317	.259	.124	-.087	-.070	.091	.030	.208	.147	.056	.375	-.046	-.042	-.069	.076	-.031	.612
9	MEN154	.251	.301	.355	-.094	-.016	-.133	.157	-.201	-.045	-.330	.127	.084	-.021	.103	-.136	-.023	-.082	.046	.544
10	MEN155	.591	.174	.248	.091	-.117	.062	-.013	.098	-.123	.141	-.074	-.012	-.369	-.042	-.053	-.102	.296	-.028	.758
11	MEN156	.487	-.087	.151	-.017	-.031	-.072	.067	.119	-.292	.152	.190	.156	-.088	.039	.010	.131	-.047	-.282	.569
12	MEN157	.605	.056	.069	-.120	.058	-.033	-.126	-.068	-.451	-.292	-.031	-.099	-.006	-.138	.176	.098	-.047	-.002	.774
13	MEN158	.372	.559	.376	-.055	-.125	.004	.099	.058	.057	.126	.105	.099	-.008	-.083	.250	.102	.041	.148	.767
14	MEN159	.524	-.014	.443	.130	.161	-.024	.033	-.147	-.120	-.123	-.204	-.032	-.027	-.077	-.149	.201	-.040	-.077	.686
15	MEN160	.259	.020	-.135	-.050	.219	-.060	-.079	-.057	-.030	.019	.127	-.177	.075	-.655	-.093	.193	.112	-.127	.708
16	MEN161	.338	.174	.082	-.198	.215	.409	-.068	.133	-.154	-.014	.064	-.031	-.026	-.029	-.466	-.112	.101	.136	.714
17	MEN162	.735	.091	.459	.052	-.024	.061	-.059	.043	-.146	.062	-.096	-.028	-.012	-.055	.160	-.048	.086	-.071	.850
18	MEN163	.305	.157	.053	.014	-.158	.737	.028	-.126	.029	.174	.002	-.172	.077	.018	-.099	.159	.096	-.173	.847
19	MEN164	.578	.178	.082	.157	.002	.008	.169	.018	-.452	.019	-.091	-.053	-.070	.152	-.075	-.049	.114	.061	.695
20	MEN165	.656	-.365	.013	.185	-.389	.023	-.039	.101	-.132	-.108	-.144	.013	.203	-.059	-.017	-.137	-.040	-.141	.896
21	MEN166	.781	.032	.140	.131	-.057	-.015	.030	.070	-.174	.023	-.026	.050	.066	-.058	.037	-.071	.445	-.040	.905
22	MEN167	.594	.176	.004	-.021	-.224	.111	.062	.047	-.258	-.087	.163	.154	.199	-.044	-.028	-.223	-.077	.005	.675
23	MEN168	.132	.022	.073	-.041	.603	-.017	.059	.025	-.147	-.011	.080	.015	.125	-.049	-.007	-.099	.111	-.096	.470
24	MEN169	.283	.113	.047	-.309	.050	-.006	.168	.615	-.016	.060	-.013	-.073	-.176	-.085	-.053	.067	.014	.085	.661
25	MEN170	.371	-.201	.066	.080	.078	-.043	-.051	.733	.030	-.068	.280	-.060	.002	.148	.126	.266	.029	.064	.937
26	MEN171	.290	.168	.014	.089	.019	-.047	-.009	.177	.038	-.209	.751	-.104	-.035	-.027	-.045	.073	.106	-.089	.802
27	MEN172	.330	.387	.282	-.008	-.131	.090	-.164	-.016	.021	.047	.058	.006	.257	-.033	.454	.114	.097	.270	.765
28	MEN173	.238	.148	.055	.007	.251	.217	.102	-.043	.180	.152	-.090	.398	.074	.039	-.044	.048	.698	-.033	.926
29	MEN174	.229	.270	.154	-.009	-.063	-.059	.007	-.175	-.277	.251	.158	-.171	-.126	.048	.209	.088	.184	-.062	.489
30	MEN175	.316	.039	-.001	-.007	.310	-.105	.047	-.001	-.616	.120	-.054	-.112	.227	.103	.115	.019	-.069	.077	.707
31	MEN176	.323	.122	-.218	.061	.102	-.129	-.041	.053	-.065	-.143	.345	.107	-.011	-.002	.066	-.156	.693	.051	.869
32	MEN177	.318	.423	-.135	-.154	.083	.289	.008	-.076	-.400	.222	.046	.046	.100	-.238	.032	.004	-.049	.080	.707
33	MEN178	.247	.185	.063	-.094	.150	-.141	.246	.055	-.076	-.090	-.271	-.087	.110	.026	.412	-.406	.233	.012	.711
34	MOT96	.539	-.011	.071	.027	-.046	.363	-.124	.008	-.067	-.322	-.012	.152	.115	.176	.012	.194	.262	.057	.731
35	MOT97	.313	.003	.052	-.063	.132	-.115	.082	.031	.085	-.818	.215	-.102	.061	-.004	.053	-.155	-.015	-.054	.909
36	MOT98	.226	.336	-.007	.248	.103	.075	-.008	-.039	.099	-.023	-.118	.098	-.155	-.506	.176	.010	-.126	.018	.604
37	MOT99	.467	.155	-.012	-.088	-.215	-.057	.307	.079	.054	-.231	.131	.091	.100	-.114	.057	.307	.177	-.127	.650
38	MOT100	.177	-.019	-.079	-.047	.091	.268	.163	-.071	-.096	-.096	-.151	-.022	.684	.092	.089	.166	-.014	.071	.710
39	MOT101	.135	.069	-.077	.161	.070	.151	.111	.184	-.014	.099	.044	-.014	.065	-.108	.132	.848	-.087	-.016	.901
40	MOT102	221	.129	-.057	.805	-.070	-.045	.122	-.022	-.002	.056	.053	-.038	-.004	.053	.053	.045	.054	.092	.766

41	MOT103	.277	.098	.043	.818	.123	-.022	.049	-.038	.020	.068	.091	-.229	.030	-.134	-.145	.220	.054	.106	.945
42	MOT104	.384	.090	.007	-.090	.084	.040	-.033	.121	-.229	-.098	.026	.152	-.089	-.013	.630	.191	-.023	-.180	.748
43	MOT105	.190	.111	.134	.083	.751	-.093	-.011	.116	-.036	-.193	-.060	.125	-.018	-.236	-.024	.146	.072	.090	.807
44	MOT106	.108	.059	.031	.190	-.098	.257	.054	.067	-.060	-.074	.093	-.888	.015	-.037	-.079	-.017	-.246	.012	.999
45	MOT107	.171	.227	-.105	.106	.058	-.018	.686	-.035	-.035	.032	-.092	.078	.187	-.004	.006	.060	-.022	-.257	.700
46	MOT108	.154	.509	.007	.275	.111	.147	.119	-.123	.041	-.138	.251	-.146	-.177	-.080	.160	-.390	.076	-.016	.749
47	MOT109	.310	.217	.120	-.038	.008	.624	.097	.106	.066	-.006	-.136	-.260	.160	-.049	.148	.062	-.155	-.056	.740
48	MOT110	.217	.412	-.101	.158	-.003	.190	.511	.106	-.051	-.142	.109	-.242	.010	.130	-.062	.111	.035	.005	.688
49	MOT111	.215	.251	-.010	.165	.314	.192	-.017	-.127	-.133	-.080	.162	.322	-.053	-.011	.115	-.017	.045	-.077	.467

Trace	7.88	2.23	2.79	2.07	1.85	1.86	1.29	1.33	1.53	1.63	1.41	1.67	1.45	1.11	1.47	1.78	1.84	1.03

Note. The column after the orthogonalized matrix presents the sum of the squared entries in a given row. The first 2 columns represent the second order factors. The next 16 columns represent the first order solution, based on variance orthogonal to the second order (Gorsuch, 1983, pp. 248-254).

Appendix A.1
Item Difficulty (P) Values and Descriptive Statistics for Age 2 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN13	.90	.30	5.44	-2.71	0	1	Visually recognizes caregiver
MEN14	.91	.29	6.59	-2.91	0	1	Smiles when examiner speaks
MEN15	.91	.29	6.59	-2.91	0	1	Eyes follow ring-horizontal
MEN16	.88	.33	3.71	-2.37	0	1	Eyes follow ring-vertical
MEN17	.69	.46	-1.33	-.83	0	1	Eyes follow ring-circular
MEN18	.71	.46	-1.14	-.94	0	1	Eyes follow ring-arc
MEN19	.72	.45	-1.03	-.99	0	1	Smiles when examiner smiles
MEN20	.79	.41	.09	-1.45	0	1	Reacts to disappearance of face
MEN21	.72	.45	-1.03	-.99	0	1	Vocalizes when examiner speaks
MEN22	.79	.41	.09	-1.45	0	1	Vocalizes 2 different vowel sounds
MEN23	.48	.50	-2.03	.08	0	1	Glances from bell to rattle
MEN24	.59	.49	-1.90	-.37	0	1	Head follows ring
MEN25	.52	.50	-2.03	-.08	0	1	Regards cube for 3 seconds
MEN26	.72	.45	-1.03	-.99	0	1	Habituates to visual stimulus
MEN27	.43	.50	-1.96	.29	0	1	Discriminates novel visual pattern
MEN28	.52	.50	-2.03	-.08	0	1	Displays visual preference
MEN29	.47	.50	-2.03	.12	0	1	Prefers novelty
MEN30	.60	.49	-1.87	-.41	0	1	Turns head to sound
MEN31	.73	.45	-.91	-1.05	0	1	Vocalizes attitude
MEN32	.43	.50	-1.96	.29	0	1	Eyes follow ball rolling across tab
MEN33	.45	.50	-2.00	.20	0	1	Vocalizes when examiner smiles
MEN34	.22	.42	-.12	1.37	0	1	Inspects own hand(s)
MEN35	.22	.42	-.12	1.37	0	1	Plays with rattle
MEN36	.26	.44	-.78	1.11	0	1	Eyes follow rod
MEN37	.23	.42	-.31	1.30	0	1	Manipulates ring
MOT7	.79	.41	.09	-1.45	0	1	Holds head erect and steady for 15
MOT8	.85	.36	2.00	-1.99	0	1	Lifts head
MOT9	.88	.33	3.71	-2.37	0	1	Holds legs up for 2 seconds
MOT10	.92	.27	8.04	-3.14	0	1	Makes crawling movements
MOT11	.76	.43	-.48	-1.24	0	1	Turns from side to back
MOT12	.74	.44	-.78	-1.11	0	1	Attempts to bring hand to mouth
MOT13	.71	.46	-1.14	-.94	0	1	Retains ring
MOT14	.80	.40	.33	-1.52	0	1	Adjusts head to ventral suspension
MOT15	.64	.48	-1.68	-.59	0	1	Holds head steady while being moved
MOT16	.33	.47	-1.49	.73	0	1	Displays symmetric movements
MOT17	.67	.47	-1.49	-.73	0	1	Holds head in midline position
MOT18	.56	.50	-1.98	-.25	0	1	Elevates self by arms
MOT19	.29	.46	-1.14	.94	0	1	Balances head
MOT20	.36	.48	-1.68	.59	0	1	Maintains head at 45* and lowers wi
MOT21	.28	.45	-1.03	.99	0	1	Sits with support

Appendix A.2
Item Difficulty (P) Values and Descriptive Statistics for Age 3 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN20	.88	.33	3.71	-2.37	0	1	Reacts to disappearance of face
MEN21	.90	.30	5.44	-2.71	0	1	Vocalizes when examiner speaks
MEN22	.78	.42	-.12	-1.37	0	1	Vocalizes 2 different vowel sounds
MEN23	.68	.47	-1.41	-.78	0	1	Glances from bell to rattle
MEN24	.75	.44	-.64	-1.17	0	1	Head follows ring
MEN25	.74	.44	-.78	-1.11	0	1	Regards cube for 3 seconds
MEN26	.86	.35	2.49	-2.11	0	1	Habituates to visual stimulus
MEN27	.57	.50	-1.96	-.29	0	1	Discriminates novel visual pattern
MEN28	.70	.46	-1.24	-.89	0	1	Displays visual preference
MEN29	.45	.50	-2.00	.20	0	1	Prefers novelty
MEN30	.88	.33	3.71	-2.37	0	1	Turns head to sound
MEN31	.94	.24	12.40	-3.76	0	1	Vocalizes attitude
MEN32	.69	.46	-1.33	-.83	0	1	Eyes follow ball rolling across tab
MEN33	.73	.45	-.91	-1.05	0	1	Vocalizes when examiner smiles
MEN34	.55	.50	-2.00	-.20	0	1	Inspects own hand(s)
MEN35	.48	.50	-2.03	.08	0	1	Plays with rattle
MEN36	.47	.50	-2.03	.12	0	1	Eyes follow rod
MEN37	.34	.48	-1.56	.69	0	1	Manipulates ring
MEN38	.29	.46	-1.14	.94	0	1	Reaches for suspended ring
MEN39	.26	.44	-.78	1.11	0	1	Grasps suspended ring
MEN40	.13	.34	3.05	2.23	0	1	Carries ring to mouth
MOT11	.95	.22	15.90	-4.19	0	1	Turns from side to back
MOT12	.93	.26	9.91	-3.42	0	1	Attempts to bring hand to mouth
MOT13	.93	.26	9.91	-3.42	0	1	Retains ring
MOT14	.97	.17	29.90	-5.59	0	1	Adjusts head to ventral suspension
MOT15	.95	.22	15.90	-4.19	0	1	Holds head steady while being moved
MOT16	.93	.26	9.91	-3.42	0	1	Displays symmetric movements
MOT17	.78	.42	-.12	-1.37	0	1	Holds head in midline position
MOT18	.81	.39	.59	-1.60	0	1	Elevates self by arms
MOT19	.69	.46	-1.33	-.83	0	1	Balances head
MOT20	.73	.45	-.91	-1.05	0	1	Maintains head at 45* and lowers wi
MOT21	.75	.44	-.64	-1.17	0	1	Sits with support
MOT22	.32	.47	-1.41	.78	0	1	Sits with slight support for 10 sec
MOT23	.73	.45	-.91	-1.05	0	1	Keeps hands open
MOT24	.62	.49	-1.78	-.50	0	1	Maintains head at 90* and lowers wi
MOT25	.48	.50	-2.03	.08	0	1	Shifts weight on arms
MOT26	.37	.49	-1.74	.55	0	1	Turns from back to side
MOT27	.53	.50	-2.03	-.12	0	1	Rotates wrist
MOT28	.36	.48	-1.68	.59	0	1	Sits alone momentarily
MOT29	.46	.50	-2.01	.16	0	1	Uses whole hand to grasp rod

Appendix A.3
Item Difficulty (P) Values and Descriptive Statistics for Age 4 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN30	.94	.24	12.40	-3.76	0	1	Turns head to sound
MEN31	.93	.26	9.91	-3.42	0	1	Vocalizes attitude
MEN32	.92	.27	8.04	-3.14	0	1	Eyes follow ball rolling across tab
MEN33	.77	.42	-.31	-1.30	0	1	Vocalizes when examiner smiles
MEN34	.72	.45	-1.03	-.99	0	1	Inspects own hand(s)
MEN35	.86	.35	2.49	-2.11	0	1	Plays with rattle
MEN36	.78	.42	-.12	-1.37	0	1	Eyes follow rod
MEN37	.76	.43	-.48	-1.24	0	1	Manipulates ring
MEN38	.71	.46	-1.14	-.94	0	1	Reaches for suspended ring
MEN39	.61	.49	-1.83	-.46	0	1	Grasps suspended ring
MEN40	.64	.48	-1.68	-.59	0	1	Carries ring to mouth
MEN41	.70	.46	-1.24	-.89	0	1	Approaches mirror image
MEN42	.61	.49	-1.83	-.46	0	1	Reaches for cube
MEN43	.50	.50	-2.04	.00	0	1	Reaches persistently
MEN44	.48	.50	-2.03	.08	0	1	Uses eye-hand coordination when rea
MEN45	.50	.50	-2.04	.00	0	1	Picks up cube
MEN46	.52	.50	-2.03	-.08	0	1	Fixates on disappearance of ball fo
MEN47	.84	.37	1.58	-1.88	0	1	Displays awareness of novel surroun
MEN48	.49	.50	-2.04	.04	0	1	Plays with string
MEN49	.20	.40	.33	1.52	0	1	Smiles at mirror image
MEN50	.19	.39	.59	1.60	0	1	Responds playfully to mirror image
MEN51	.34	.48	-1.56	.69	0	1	Regards pellet
MEN52	.20	.40	.33	1.52	0	1	Bangs in play
MOT17	.97	.17	29.90	-5.59	0	1	Holds head in midline position
MOT18	.94	.24	12.40	-3.76	0	1	Elevates self by arms
MOT19	.88	.33	3.71	-2.37	0	1	Balances head
MOT20	.94	.24	12.40	-3.76	0	1	Maintains head at 45* and lowers wi
MOT21	.79	.41	.09	-1.45	0	1	Sits with support
MOT22	.55	.50	-2.00	-.20	0	1	Sits with slight support for 10 sec
MOT23	.85	.36	2.00	-1.99	0	1	Keeps hands open
MOT24	.73	.45	-.91	-1.05	0	1	Maintains head at 90* and lowers wi
MOT25	.66	.48	-1.56	-.69	0	1	Shifts weight on arms
MOT26	.46	.50	-2.01	.16	0	1	Turns from back to side
MOT27	.61	.49	-1.83	-.46	0	1	Rotates wrist
MOT28	.46	.50	-2.01	.16	0	1	Sits alone momentarily
MOT29	.66	.48	-1.56	-.69	0	1	Uses whole hand to grasp rod
MOT30	.39	.49	-1.83	.46	0	1	Reaches unilaterally
MOT31	.36	.48	-1.68	.59	0	1	Uses partial thumb opposition to gr
MOT32	.39	.49	-1.83	.46	0	1	Attempts to secure pellet
MOT33	.29	.46	-1.14	.94	0	1	Pulls to sitting position
MOT34	.30	.46	-1.24	.89	0	1	Sits alone for 30 seconds
MOT35	.40	.49	-1.87	.41	0	1	Sits alone while playing with toy

Appendix A.4
Item Difficulty (P) Values and Descriptive Statistics for Age 5 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN42	.92	.27	8.04	-3.14	0	1	Reaches for cube
MEN43	.88	.33	3.71	-2.37	0	1	Reaches persistently
MEN44	.86	.35	2.49	-2.11	0	1	Uses eye-hand coordination when rea
MEN45	.82	.39	.88	-1.69	0	1	Picks up cube
MEN46	.92	.27	8.04	-3.14	0	1	Fixates on disappearance of ball fo
MEN47	.85	.36	2.00	-1.99	0	1	Displays awareness of novel surroun
MEN48	.81	.39	.59	-1.60	0	1	Plays with string
MEN49	.79	.41	.09	-1.45	0	1	Smiles at mirror image
MEN50	.72	.45	-1.03	-.99	0	1	Responds playfully to mirror image
MEN51	.66	.48	-1.56	-.69	0	1	Regards pellet
MEN52	.55	.50	-2.00	-.20	0	1	Bangs in play
MEN53	.57	.50	-1.96	-.29	0	1	Reaches for second cube
MEN54	.59	.49	-1.90	-.37	0	1	Transfers object from hand to hand
MEN55	.66	.48	-1.56	-.69	0	1	Lifts inverted cup
MEN56	.48	.50	-2.03	.08	0	1	Looks for fallen spoon
MEN57	.41	.49	-1.90	.37	0	1	Picks up cube deftly
MEN58	.38	.49	-1.78	.50	0	1	Retains cube for 3 seconds
MEN59	.30	.46	-1.24	.89	0	1	Manipulates bell, showing interest
MEN60	.30	.46	-1.24	.89	0	1	Attends to scribbling
MEN61	.54	.50	-2.01	-.16	0	1	Vocalizes 3 different vowel sounds
MEN62	.24	.43	-.48	1.24	0	1	Pulls string adatively to secure ri
MEN63	.33	.47	-1.49	.73	0	1	Imitates vocalization
MEN64	.13	.34	3.05	2.23	0	1	Cooperates in game
MEN65	.13	.34	3.05	2.23	0	1	Retains 2 of 3 cubes for 3 seconds
MEN66	.13	.34	3.05	2.23	0	1	Rings bell purposely
MOT25	.90	.30	5.44	-2.71	0	1	Shifts weight on arms
MOT26	.80	.40	.33	-1.52	0	1	Turns from back to side
MOT27	.90	.30	5.44	-2.71	0	1	Rotates wrist
MOT28	.68	.47	-1.41	-.78	0	1	Sits alone momentarily
MOT29	.87	.34	3.05	-2.23	0	1	Uses whole hand to grasp rod
MOT30	.78	.42	-.12	-1.37	0	1	Reaches unilaterally
MOT31	.57	.50	-1.96	-.29	0	1	Uses partial thumb opposition to gr
MOT32	.42	.50	-1.93	.33	0	1	Attempts to secure pellet
MOT33	.68	.47	-1.41	-.78	0	1	Pulls to sitting position
MOT34	.26	.44	-.78	1.11	0	1	Sits alone for 30 seconds
MOT35	.64	.48	-1.68	-.59	0	1	Sits alone while playing with toy
MOT36	.46	.50	-2.01	.16	0	1	Sits alone steadily
MOT37	.35	.48	-1.63	.64	0	1	Uses pads of fingertips to grasp cu
MOT38	.53	.50	-2.03	-.12	0	1	Turns from back to stomach
MOT39	.13	.34	3.05	2.23	0	1	Grasps foot with hands
MOT40	.18	.39	.88	1.69	0	1	Makes early stepping movements
MOT41	.18	.39	.88	1.69	0	1	Uses whole hand to grasp pellet

Appendix A.5
Item Difficulty (P) Values and Descriptive Statistics for Age 6 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN49	.87	.34	3.05	-2.23	0	1	Smiles at mirror image
MEN50	.84	.37	1.58	-1.88	0	1	Responds playfully to mirror image
MEN51	.87	.34	3.05	-2.23	0	1	Regards pellet
MEN52	.87	.34	3.05	-2.23	0	1	Bangs in play
MEN53	.81	.39	.59	-1.60	0	1	Reaches for second cube
MEN54	.79	.41	.09	-1.45	0	1	Transfers object from hand to hand
MEN55	.93	.26	9.91	-3.42	0	1	Lifts inverted cup
MEN56	.84	.37	1.58	-1.88	0	1	Looks for fallen spoon
MEN57	.81	.39	.59	-1.60	0	1	Picks up cube deftly
MEN58	.67	.47	-1.49	-.73	0	1	Retains cube for 3 seconds
MEN59	.67	.47	-1.49	-.73	0	1	Manipulates bell, showing interest
MEN60	.61	.49	-1.83	-.46	0	1	Attends to scribbling
MEN61	.53	.50	-2.03	-.12	0	1	Vocalizes 3 different vowel sounds
MEN62	.48	.50	-2.03	.08	0	1	Pulls string adatively to secure ri
MEN63	.47	.50	-2.03	.12	0	1	Imitates vocalization
MEN64	.46	.50	-2.01	.16	0	1	Cooperates in game
MEN65	.46	.50	-2.01	.16	0	1	Retains 2 of 3 cubes for 3 seconds
MEN66	.47	.50	-2.03	.12	0	1	Rings bell purposely
MEN67	.53	.50	-2.03	-.12	0	1	Lifts cup by handle
MEN68	.46	.50	-2.01	.16	0	1	Uses gesture to make wants known
MEN69	.35	.48	-1.63	.64	0	1	Looks at pictures in book
MEN70	.28	.45	-1.03	.99	0	1	Listens selectively to 2 familiar w
MEN71	.14	.35	2.49	2.11	0	1	Repeats vowel-consonant combination
MEN72	.19	.39	.59	1.60	0	1	Looks for contents of box
MEN73	.05	.22	15.90	4.19	0	1	Turns pages of book
MOT28	.87	.34	3.05	-2.23	0	1	Sits alone momentarily
MOT29	.96	.20	21.14	-4.77	0	1	Uses whole hand to grasp rod
MOT30	.86	.35	2.49	-2.11	0	1	Reaches unilaterally
MOT31	.79	.41	.09	-1.45	0	1	Uses partial thumb opposition to gr
MOT32	.80	.40	.33	-1.52	0	1	Attempts to secure pellet
MOT33	.71	.46	-1.14	-.94	0	1	Pulls to sitting position
MOT34	.61	.49	-1.83	-.46	0	1	Sits alone for 30 seconds
MOT35	.59	.49	-1.90	-.37	0	1	Sits alone while playing with toy
MOT36	.50	.50	-2.04	.00	0	1	Sits alone steadily
MOT37	.54	.50	-2.01	-.16	0	1	Uses pads of fingertips to grasp cu
MOT38	.76	.43	-.48	-1.24	0	1	Turns from back to stomach
MOT39	.68	.47	-1.41	-.78	0	1	Grasps foot with hands
MOT40	.59	.49	-1.90	-.37	0	1	Makes early stepping movements
MOT41	.54	.50	-2.01	-.16	0	1	Uses whole hand to grasp pellet
MOT42	.59	.49	-1.90	-.37	0	1	Attempts to raise self to sit
MOT43	.52	.50	-2.03	-.08	0	1	Moves forward, using prewalking met
MOT44	.45	.50	-2.00	.20	0	1	Supports weight momentarily
MOT45	.40	.49	-1.87	.41	0	1	Pulls to sitting position
MOT46	.26	.44	-.78	1.11	0	1	Shifts weight while standing
MOT47	.29	.46	-1.14	.94	0	1	Raises self to sitting position
MOT48	.14	.35	2.49	2.11	0	1	Brings spoons or cubes to midline

Appendix A.6
Item Difficulty (P) Values and Descriptive Statistics for Age 8 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN59	.82	.39	.88	-1.69	0	1	Manipulates bell, showing interest
MEN60	.82	.39	.88	-1.69	0	1	Attends to scribbling
MEN61	.96	.20	21.14	-4.77	0	1	Vocalizes 3 different vowel sounds
MEN62	.81	.39	.59	-1.60	0	1	Pulls string adatively to secure ri
MEN63	.88	.33	3.71	-2.37	0	1	Imitates vocalization
MEN64	.79	.41	.09	-1.45	0	1	Cooperates in game
MEN65	.81	.39	.59	-1.60	0	1	Retains 2 of 3 cubes for 3 seconds
MEN66	.75	.44	-.64	-1.17	0	1	Rings bell purposely
MEN67	.66	.48	-1.56	-.69	0	1	Lifts cup by handle
MEN68	.80	.40	.33	-1.52	0	1	Uses gesture to make wants known
MEN69	.77	.42	-.31	-1.30	0	1	Looks at pictures in book
MEN70	.58	.50	-1.93	-.33	0	1	Listens selectively to 2 familiar w
MEN71	.36	.48	-1.68	.59	0	1	Repeats vowel-consonant combination
MEN72	.43	.50	-1.96	.29	0	1	Looks for contents of box
MEN73	.36	.48	-1.68	.59	0	1	Turns pages of book
MEN74	.70	.46	-1.24	-.89	0	1	Puts one cube in cup
MEN75	.26	.44	-.78	1.11	0	1	Attempts to secure three cubes
MEN76	.11	.31	4.50	2.53	0	1	Jabbers expressively
MEN77	.41	.49	-1.90	.37	0	1	Pushes car
MEN78	.33	.47	-1.49	.73	0	1	Vocalizes 4 different vowel-consona
MEN79	.40	.49	-1.87	.41	0	1	Fingers holes in pegboard
MEN80	.20	.40	.33	1.52	0	1	Removes lid from box
MEN81	.27	.45	-.91	1.05	0	1	Responds to spoken request
MEN82	.02	.14	47.42	6.96	0	1	Suspends ring by string
MOT42	.75	.44	-.64	-1.17	0	1	Attempts to raise self to sit
MOT43	.87	.34	3.05	-2.23	0	1	Moves forward, using prewalking met
MOT44	.75	.44	-.64	-1.17	0	1	Supports weight momentarily
MOT45	.77	.42	-.31	-1.30	0	1	Pulls to sitting position
MOT46	.74	.44	-.78	-1.11	0	1	Shifts weight while standing
MOT47	.64	.48	-1.68	-.59	0	1	Raises self to sitting position
MOT48	.80	.40	.33	-1.52	0	1	Brings spoons or cubes to midline
MOT49	.72	.45	-1.03	-.99	0	1	Uses partial thumb opposisition to
MOT50	.84	.37	1.58	-1.88	0	1	Rotates trunk while sitting alone
MOT51	.81	.39	.59	-1.60	0	1	Moves from sitting to creeping posi
MOT52	.64	.48	-1.68	-.59	0	1	Raises self to standing position
MOT53	.50	.50	-2.04	.00	0	1	Attempts to walk
MOT54	.48	.50	-2.03	.08	0	1	Walks sideways while holding on to
MOT55	.54	.50	-2.01	-.16	0	1	Sits down
MOT56	.56	.50	-1.98	-.25	0	1	Uses pads of fingertips to grasp pe
MOT57	.76	.43	-.48	-1.24	0	1	Uses partial thumb opposition to gr
MOT58	.18	.39	.88	1.69	0	1	Grasps pencil at farthest end
MOT59	.27	.45	-.91	1.05	0	1	Stands up 1
MOT60	.32	.47	-1.41	.78	0	1	Walks with help

Appendix A.7

Item Difficulty (P) Values and Descriptive Statistics for Age 10 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN64	.86	.35	2.49	-2.11	0	1	Cooperates in game
MEN65	.86	.35	2.49	-2.11	0	1	Retains 2 of 3 cubes for 3 seconds
MEN66	.87	.34	3.05	-2.23	0	1	Rings bell purposely
MEN67	.97	.17	29.90	-5.59	0	1	Lifts cup by handle
MEN68	.85	.36	2.00	-1.99	0	1	Uses gesture to make wants known
MEN69	.84	.37	1.58	-1.88	0	1	Looks at pictures in book
MEN70	.81	.39	.59	-1.60	0	1	Listens selectively to 2 familiar w
MEN71	.71	.46	-1.14	-.94	0	1	Repeats vowel-consonant combination
MEN72	.70	.46	-1.24	-.89	0	1	Looks for contents of box
MEN73	.73	.45	-.91	-1.05	0	1	Turns pages of book
MEN74	.61	.49	-1.83	-.46	0	1	Puts one cube in cup
MEN75	.62	.49	-1.78	-.50	0	1	Attempts to secure three cubes
MEN76	.64	.48	-1.68	-.59	0	1	Jabbers expressively
MEN77	.59	.49	-1.90	-.37	0	1	Pushes car
MEN78	.62	.49	-1.78	-.50	0	1	Vocalizes 4 different vowel-consona
MEN79	.60	.49	-1.87	-.41	0	1	Fingers holes in pegboard
MEN80	.59	.49	-1.90	-.37	0	1	Removes lid from box
MEN81	.54	.50	-2.01	-.16	0	1	Responds to spoken request
MEN82	.53	.50	-2.03	-.12	0	1	Suspends ring by string
MEN83	.43	.50	-1.96	.29	0	1	Pats toy in imitation
MEN84	.46	.50	-2.01	.16	0	1	Finds one object
MEN85	.37	.49	-1.74	.55	0	1	Removes pellets from bottle
MEN86	.26	.44	-.78	1.11	0	1	Puts 3 cubes in cup
MEN87	.01	.10	100.00	10.00	0	1	Places 1 peg repeatedly
MOT51	.95	.22	15.90	-4.19	0	1	Moves from sitting to creeping posi
MOT52	.89	.31	4.50	-2.53	0	1	Raises self to standing position
MOT53	.81	.39	.59	-1.60	0	1	Attempts to walk
MOT54	.82	.39	.88	-1.69	0	1	Walks sideways while holding on to
MOT55	.71	.46	-1.14	-.94	0	1	Sits down
MOT56	.75	.44	-.64	-1.17	0	1	Uses pads of fingertips to grasp pe
MOT57	.81	.39	.59	-1.60	0	1	Uses partial thumb opposition to gr
MOT58	.25	.44	-.64	1.17	0	1	Grasps pencil at farthest end
MOT59	.27	.45	-.91	1.05	0	1	Stands up 1
MOT60	.70	.46	-1.24	-.89	0	1	Walks with help
MOT61	.41	.49	-1.90	.37	0	1	Stands alone
MOT62	.23	.42	-.31	1.30	0	1	Walks alone
MOT63	.21	.41	.09	1.45	0	1	Walks alone with good coordination
MOT64	.26	.44	-.78	1.11	0	1	Throws ball

Appendix A.8
Item Difficulty (P) Values and Descriptive Statistics for Age 12 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN71	.85	.36	2.00	-1.99	0	1	Repeats vowel-consonant combination
MEN72	.90	.30	5.44	-2.71	0	1	Looks for contents of box
MEN73	.84	.37	1.58	-1.88	0	1	Turns pages of book
MEN74	.93	.26	9.91	-3.42	0	1	Puts one cube in cup
MEN75	.79	.41	.09	-1.45	0	1	Attempts to secure three cubes
MEN76	.73	.45	-.91	-1.05	0	1	Jabbers expressively
MEN77	.92	.27	8.04	-3.14	0	1	Pushes car
MEN78	.79	.41	.09	-1.45	0	1	Vocalizes 4 different vowel-consona
MEN79	.92	.27	8.04	-3.14	0	1	Fingers holes in pegboard
MEN80	.79	.41	.09	-1.45	0	1	Removes lid from box
MEN81	.81	.39	.59	-1.60	0	1	Responds to spoken request
MEN82	.71	.46	-1.14	-.94	0	1	Suspends ring by string
MEN83	.67	.47	-1.49	-.73	0	1	Pats toy in imitation
MEN84	.69	.46	-1.33	-.83	0	1	Finds one object
MEN85	.67	.47	-1.49	-.73	0	1	Removes pellets from bottle
MEN86	.76	.43	-.48	-1.24	0	1	Puts 3 cubes in cup
MEN87	.11	.31	4.50	2.53	0	1	Places 1 peg repeatedly
MEN88	.64	.48	-1.68	-.59	0	1	Retrieves toy
MEN89	.61	.49	-1.83	-.46	0	1	Puts 6 beads in box
MEN90	.10	.30	5.44	2.71	0	1	Places 1 piece
MEN91	.49	.50	-2.04	.04	0	1	Scribbles spontaneously
MEN92	.43	.50	-1.96	.29	0	1	Closes round container
MEN93	.28	.45	-1.03	.99	0	1	Places circle piece
MEN94	.42	.50	-1.93	.33	0	1	Imitates word
MEN95	.29	.46	-1.14	.94	0	1	Puts 9 cubes in cup
MEN96	.39	.49	-1.83	.46	0	1	Finds toy under reversed cups
MEN97	.31	.46	-1.33	.83	0	1	Builds tower of 2 cubes
MEN98	.28	.45	-1.03	.99	0	1	Places pegs in 70 seconds
MEN99	.03	.17	29.90	5.59	0	1	Points to 2 pictures
MEN100	.31	.46	-1.33	.83	0	1	Uses 2 different words appropriatel
MOT58	.86	.35	2.49	-2.11	0	1	Grasps pencil at farthest end
MOT59	.74	.44	-.78	-1.11	0	1	Stands up 1
MOT60	.94	.24	12.40	-3.76	0	1	Walks with help
MOT61	.83	.38	1.21	-1.78	0	1	Stands alone
MOT62	.69	.46	-1.33	-.83	0	1	Walks alone
MOT63	.67	.47	-1.49	-.73	0	1	Walks alone with good coordination
MOT64	.60	.49	-1.87	-.41	0	1	Throws ball
MOT65	.21	.41	.09	1.45	0	1	Squats briefly
MOT66	.37	.49	-1.74	.55	0	1	Walks up stairs with help
MOT67	.32	.47	-1.41	.78	0	1	Walks backward
MOT68	.17	.38	1.21	1.78	0	1	Stands up 2
MOT69	.22	.42	-.12	1.37	0	1	Walks down stairs with help
MOT70	.39	.49	-1.83	.46	0	1	Grasps pencil at middle
MOT71	.26	.44	-.78	1.11	0	1	Walks sideways
MOT72	.30	.46	-1.24	.89	0	1	Stands with right foot with help

Appendix A.9
Item Difficulty (P) Values and Descriptive Statistics for Age 15 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN87	.47	.50	-2.03	.12	0	1	Places 1 peg repeatedly
MEN88	.78	.42	-.12	-1.37	0	1	Retrieves toy
MEN89	.93	.26	9.91	-3.42	0	1	Puts 6 beads in box
MEN90	.20	.40	.33	1.52	0	1	Places 1 piece
MEN91	.80	.40	.33	-1.52	0	1	Scribbles spontaneously
MEN92	.77	.42	-.31	-1.30	0	1	Closes round container
MEN93	.60	.49	-1.87	-.41	0	1	Places circle piece
MEN94	.59	.49	-1.90	-.37	0	1	Imitates word
MEN95	.68	.47	-1.41	-.78	0	1	Puts 9 cubes in cup
MEN96	.51	.50	-2.04	-.04	0	1	Finds toy under reversed cups
MEN97	.60	.49	-1.87	-.41	0	1	Builds tower of 2 cubes
MEN98	.50	.50	-2.04	.00	0	1	Places pegs in 70 seconds
MEN99	.32	.47	-1.41	.78	0	1	Points to 2 pictures
MEN100	.58	.50	-1.93	-.33	0	1	Uses 2 different words appropriatel
MEN101	.56	.50	-1.98	-.25	0	1	Shows shoes, other object, or cloth
MEN102	.47	.50	-2.03	.12	0	1	Retrieves toy
MEN103	.51	.50	-2.04	-.04	0	1	Imitates crayon stroke
MEN104	.49	.50	-2.04	.04	0	1	Uses rod to attain toy
MEN105	.50	.50	-2.04	.00	0	1	Retrieves toy
MEN106	.32	.47	-1.41	.78	0	1	Uses word(s) to make wants known
MEN107	.44	.50	-1.98	.25	0	1	Follows directions
MEN108	.18	.39	.88	1.69	0	1	Points to 3 of dolls body parts
MEN109	.32	.47	-1.41	.78	0	1	Names 1 picture
MEN110	.33	.47	-1.49	.73	0	1	Names 1 object
MEN111	.05	.22	15.90	4.19	0	1	Combines word and gesture
MOT63	.85	.36	2.00	-1.99	0	1	Walks alone with good coordination
MOT64	.85	.36	2.00	-1.99	0	1	Throws ball
MOT65	.39	.49	-1.83	.46	0	1	Squats briefly
MOT66	.65	.48	-1.63	-.64	0	1	Walks up stairs with help
MOT67	.65	.48	-1.63	-.64	0	1	Walks backward
MOT68	.65	.48	-1.63	-.64	0	1	Stands up 2
MOT69	.55	.50	-2.00	-.20	0	1	Walks down stairs with help
MOT70	.52	.50	-2.03	-.08	0	1	Grasps pencil at middle
MOT71	.54	.50	-2.01	-.16	0	1	Walks sideways
MOT72	.45	.50	-2.00	.20	0	1	Stands with right foot with help
MOT73	.43	.50	-1.96	.29	0	1	Stands on left foot with help
MOT74	.09	.29	6.59	2.91	0	1	Uses pads of fingertips to grasp pe
MOT75	.09	.29	6.59	2.91	0	1	Uses hand to hold paper in place
MOT76	.43	.24	-.48	1.24	0	1	Places 10 pellets in bottle in 60 s
MOT77	.30	.46	-1.24	.89	0	1	Runs with coordination
MOT78	.36	.48	-1.68	.59	0	1	Jumps off floor
MOT79	.07	.26	9.91	3.42	0	1	Walks up stairs alone, placing both

Appendix A.10

Item Difficulty (P) Values and Descriptive Statistics for Age 18 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN97	.86	.35	2.49	-2.11	0	1	Builds tower of 2 cubes
MEN98	.85	.36	2.00	-1.99	0	1	Places pegs in 70 seconds
MEN99	.63	.49	-1.74	-.55	0	1	Points to 2 pictures
MEN100	.98	.14	47.42	-6.96	0	1	Uses 2 different words appropriatel
MEN101	.98	.14	47.42	-6.96	0	1	Shows shoes, other object, or cloth
MEN102	.96	.20	21.14	-4.77	0	1	Retrieves toy
MEN103	.70	.46	-1.24	-.89	0	1	Imitates crayon stroke
MEN104	.96	.20	21.14	-4.77	0	1	Uses rod to attain toy
MEN105	.74	.44	-.78	-1.11	0	1	Retrieves toy
MEN106	.70	.46	-1.24	-.89	0	1	Uses word(s) to make wants known
MEN107	.67	.47	-1.49	-.73	0	1	Follows directions
MEN108	.60	.49	-1.87	-.41	0	1	Points to 3 of dolls body parts
MEN109	.62	.49	-1.78	-.50	0	1	Names 1 picture
MEN110	.59	.49	-1.90	-.37	0	1	Names 1 object
MEN111	.54	.50	-2.01	-.16	0	1	Combines word and gesture
MEN112	.09	.29	6.59	2.91	0	1	Places 4 pieces in 150 seconds
MEN113	.46	.50	-2.01	.16	0	1	Says 8 different words
MEN114	.43	.50	-1.96	.29	0	1	Uses a 2-word utterance
MEN115	.35	.48	-1.63	.64	0	1	Completes pink board
MEN116	.34	.48	-1.56	.69	0	1	Differentiates scribble from stroke
MEN117	.29	.46	-1.14	.94	0	1	Imitates a 2-word sentence
MEN118	.51	.50	-2.04	-.04	0	1	Identifies objects in photograph
MEN119	.26	.44	-.78	1.11	0	1	Places pegs in 25 seconds
MEN120	.31	.46	-1.33	.83	0	1	Completes reversed pink board
MEN121	.19	.39	.59	1.60	0	1	Uses pronoun(s)
MEN122	.24	.43	-.48	1.24	0	1	Points to 5 pictures
MEN123	.19	.39	.59	1.60	0	1	Builds tower of 6 cubes
MEN124	.19	.39	.59	1.60	0	1	Discriminates book, cube, and key
MEN125	.22	.42	-.12	1.37	0	1	Matches pictures
MEN126	.13	.34	3.05	2.23	0	1	Names 3 objects
MEN127	.19	.39	.59	1.60	0	1	Uses a 3-word sentence
MOT66	.84	.37	1.58	-1.88	0	1	Walks up stairs with help
MOT67	.86	.35	2.49	-2.11	0	1	Walks backward
MOT68	.87	.34	3.05	-2.23	0	1	Stands up 2
MOT69	.78	.42	-.12	-1.37	0	1	Walks down stairs with help
MOT70	.83	.38	1.21	-1.78	0	1	Grasps pencil at middle
MOT71	.73	.45	-.91	-1.05	0	1	Walks sideways
MOT72	.76	.43	-.48	-1.24	0	1	Stands with right foot with help
MOT73	.70	.46	-1.24	-.89	0	1	Stands on left foot with help
MOT74	.54	.50	-2.01	-.16	0	1	Uses pads of fingertips to grasp pe
MOT75	.41	.49	-1.90	.37	0	1	Uses hand to hold paper in place
MOT76	.58	.50	-1.93	-.33	0	1	Places 10 pellets in bottle in 60 s
MOT77	.64	.48	-1.68	-.59	0	1	Runs with coordination
MOT78	.66	.48	-1.56	-.69	0	1	Jumps off floor
MOT79	.27	.45	-.91	1.05	0	1	Walks up stairs alone, placing both
MOT80	.14	.35	2.49	2.11	0	1	Walks down stairs alone, placing bo
MOT81	.47	.50	-2.03	.12	0	1	Jumps from bottom step
MOT82	.17	.38	1.21	1.78	0	1	Stands alone on right foot

Appendix A.11
Item Difficulty (P) Values and Descriptive Statistics for Age 21 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN107	.96	.20	21.14	-4.77	0	1	Follows directions
MEN108	.93	.26	9.91	-3.42	0	1	Points to 3 of dolls body parts
MEN109	.93	.26	9.91	-3.42	0	1	Names 1 picture
MEN110	.93	.26	9.91	-3.42	0	1	Names 1 object
MEN111	.87	.34	3.05	-2.23	0	1	Combines word and gesture
MEN112	.26	.44	-.78	1.11	0	1	Places 4 pieces in 150 seconds
MEN113	.84	.37	1.58	-1.88	0	1	Says 8 different words
MEN114	.72	.45	-1.03	-.99	0	1	Uses a 2-word utterance
MEN115	.73	.45	-.91	-1.05	0	1	Completes pink board
MEN116	.60	.49	-1.87	-.41	0	1	Differentiates scribble from stroke
MEN117	.60	.49	-1.87	-.41	0	1	Imitates a 2-word sentence
MEN118	.62	.49	-1.78	-.50	0	1	Identifies objects in photograph
MEN119	.57	.50	-1.96	-.29	0	1	Places pegs in 25 seconds
MEN120	.62	.49	-1.78	-.50	0	1	Completes reversed pink board
MEN121	.55	.50	-2.00	-.20	0	1	Uses pronoun(s)
MEN122	.59	.49	-1.90	-.37	0	1	Points to 5 pictures
MEN123	.54	.50	-2.01	-.16	0	1	Builds tower of 6 cubes
MEN124	.54	.50	-2.01	-.16	0	1	Discriminates book, cube, and key
MEN125	.53	.50	-2.03	-.12	0	1	Matches pictures
MEN126	.51	.50	-2.04	-.04	0	1	Names 3 objects
MEN127	.43	.50	-1.96	.29	0	1	Uses a 3-word sentence
MEN128	.49	.50	-2.04	.04	0	1	Matches 3 colors
MEN129	.40	.49	-1.87	.41	0	1	Matches a contingent utterance
MEN130	.27	.45	-.91	1.05	0	1	Completes blue board in 75 seconds
MEN131	.66	.48	-1.56	-.69	0	1	Attends to story
MEN132	.47	.50	-2.03	.12	0	1	Places beads in tube in 120 seconds
MEN133	.40	.49	-1.87	.41	0	1	Names 5 pictures
MEN134	.38	.49	-1.78	.50	0	1	Displays verbal comprehension
MEN135	.18	.39	.88	1.69	0	1	Builds tower of 8 cubes
MOT70	.79	.41	.09	-1.45	0	1	Grasps pencil at middle
MOT71	.81	.39	.59	-1.60	0	1	Walks sideways
MOT72	.91	.29	6.59	-2.91	0	1	Stands with right foot with help
MOT73	.90	.30	5.44	-2.71	0	1	Stands on left foot with help
MOT74	.69	.46	-1.33	-.83	0	1	Uses pads of fingertips to grasp pe
MOT75	.72	.45	-1.03	-.99	0	1	Uses hand to hold paper in place
MOT76	.81	.39	.59	-1.60	0	1	Places 10 pellets in bottle in 60 s
MOT77	.75	.44	-.64	-1.17	0	1	Runs with coordination
MOT78	.41	.49	-1.90	.37	0	1	Jumps off floor
MOT79	.53	.50	-2.03	-.12	0	1	Walks up stairs alone, placing both
MOT80	.38	.49	-1.78	.50	0	1	Walks down stairs alone, placing bo
MOT81	.43	.50	-1.96	.29	0	1	Jumps from bottom step
MOT82	.36	.48	-1.68	.59	0	1	Stands alone on right foot
MOT83	.28	.45	-1.03	.99	0	1	Stands alone on left foot
MOT84	.37	.49	-1.74	.55	0	1	Walks forward on line
MOT85	.38	.49	-1.78	.50	0	1	Walks backward close to line
MOT86	.00	.00	.	.	0	0	Swings legs to kick ball

Appendix A.12
Item Difficulty (P) Values and Descriptive Statistics for Age 24 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN113	1.00	.00	.	.	1	1	Says 8 different words
MEN114	.88	.33	3.71	-2.37	0	1	Uses a 2-word utterance
MEN115	.82	.39	.88	-1.69	0	1	Completes pink board
MEN116	.83	.38	1.21	-1.78	0	1	Differentiates scribble from stroke
MEN117	.75	.44	-.64	-1.17	0	1	Imitates a 2-word sentence
MEN118	.75	.44	-.64	-1.17	0	1	Identifies objects in photograph
MEN119	.72	.45	-1.03	-.99	0	1	Places pegs in 25 seconds
MEN120	.71	.46	-1.14	-.94	0	1	Completes reversed pink board
MEN121	.72	.45	-1.03	-.99	0	1	Uses pronoun(s)
MEN122	.83	.38	1.21	-1.78	0	1	Points to 5 pictures
MEN123	.76	.43	-.48	-1.24	0	1	Builds tower of 6 cubes
MEN124	.76	.43	-.48	-1.24	0	1	Discriminates book, cube, and key
MEN125	.70	.46	-1.24	-.89	0	1	Matches pictures
MEN126	.69	.46	-1.33	-.83	0	1	Names 3 objects
MEN127	.66	.48	-1.56	-.69	0	1	Uses a 3-word sentence
MEN128	.66	.48	-1.56	-.69	0	1	Matches 3 colors
MEN129	.61	.49	-1.83	-.46	0	1	Matches a contingent utterance
MEN130	.52	.50	-2.03	-.08	0	1	Completes blue board in 75 seconds
MEN131	.92	.27	8.04	-3.14	0	1	Attends to story
MEN132	.68	.47	-1.41	-.78	0	1	Places beads in tube in 120 seconds
MEN133	.66	.48	-1.56	-.69	0	1	Names 5 pictures
MEN134	.61	.49	-1.83	-.46	0	1	Displays verbal comprehension
MEN135	.49	.50	-2.04	.04	0	1	Builds tower of 8 cubes
MEN136	.57	.50	-1.96	-.29	0	1	Poses question(s)
MEN137	.44	.50	-1.98	.25	0	1	Matches 4 colors
MEN138	.41	.49	-1.90	.37	0	1	Builds train of cubes
MEN139	.42	.50	-1.93	.33	0	1	Imitates vertical and horizontal st
MEN140	.40	.49	-1.87	.41	0	1	Understands 2 prepositions
MEN141	.23	.42	-.31	1.30	0	1	Understands concept of 1
MEN142	.07	.26	9.91	3.42	0	1	Produces multiple-word utterances i
MEN143	.23	.42	-.31	1.30	0	1	Recalls geometric forms
MEN144	.32	.47	-1.41	.78	0	1	Discriminates pictures 1
MEN145	.16	.37	1.58	1.88	0	1	Compares sizes
MEN146	.15	.36	2.00	1.99	0	1	Counts
MEN147	.14	.35	2.49	2.11	0	1	Compares masses
MEN148	.03	.17	29.90	5.59	0	1	Uses past tense
MOT75	.78	.42	-.12	-1.37	0	1	Uses hand to hold paper in place
MOT76	.84	.37	1.58	-1.88	0	1	Places 10 pellets in bottle in 60 s
MOT77	.83	.38	1.21	-1.78	0	1	Runs with coordination
MOT78	.74	.44	-.78	-1.11	0	1	Jumps off floor
MOT79	.69	.46	-1.33	-.83	0	1	Walks up stairs alone, placing both
MOT80	.57	.50	-1.96	-.29	0	1	Walks down stairs alone, placing bo
MOT81	.66	.48	-1.56	-.69	0	1	Jumps from bottom step
MOT82	.51	.50	-2.04	-.04	0	1	Stands alone on right foot
MOT83	.47	.50	-2.03	.12	0	1	Stands alone on left foot
MOT84	.54	.50	-2.01	-.16	0	1	Walks forward on line
MOT85	.53	.50	-2.03	-.12	0	1	Walks backward close to line
MOT86	.33	.47	-1.49	.73	0	1	Swings legs to kick ball

MOT87	.49	.50	-2.04	.04	0	1	Jumps distance of 4 inches
MOT88	.36	.48	-1.68	.59	0	1	Laces 3 beads
MOT89	.42	.50	-1.93	.33	0	1	Walks on tiptoe for 4 steps
MOT90	.56	.50	-1.98	-.25	0	1	Grasps pencil at nearest end
MOT91	.25	.44	-.64	1.17	0	1	Imitates hand movements
MOT92	.25	.44	-.64	1.17	0	1	Tactilely discriminates shapes
MOT93	.17	.38	1.21	1.78	0	1	Manipulates pencil in hand

Appendix A.13
Item Difficulty (P) Values and Descriptive Statistics for Age 27 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN123	.87	.34	3.05	-2.23	0	1	Builds tower of 6 cubes
MEN124	.85	.36	2.00	-1.99	0	1	Discriminates book, cube, and key
MEN125	.87	.34	3.05	-2.23	0	1	Matches pictures
MEN126	.79	.41	.09	-1.45	0	1	Names 3 objects
MEN127	.81	.39	.59	-1.60	0	1	Uses a 3-word sentence
MEN128	.79	.41	.09	-1.45	0	1	Matches 3 colors
MEN129	.72	.45	-1.03	-.99	0	1	Matches a contingent utterance
MEN130	.72	.45	-1.03	-.99	0	1	Completes blue board in 75 seconds
MEN131	.99	.10	100.00	-10.00	0	1	Attends to story
MEN132	.78	.42	-.12	-1.37	0	1	Places beads in tube in 120 seconds
MEN133	.80	.40	.33	-1.52	0	1	Names 5 pictures
MEN134	.78	.42	-.12	-1.37	0	1	Displays verbal comprehension
MEN135	.75	.44	-.64	-1.17	0	1	Builds tower of 8 cubes
MEN136	.63	.49	-1.74	-.55	0	1	Poses question(s)
MEN137	.66	.48	-1.56	-.69	0	1	Matches 4 colors
MEN138	.63	.49	-1.74	-.55	0	1	Builds train of cubes
MEN139	.60	.49	-1.87	-.41	0	1	Imitates vertical and horizontal st
MEN140	.64	.48	-1.68	-.59	0	1	Understands 2 prepositions
MEN141	.54	.50	-2.01	-.16	0	1	Understands concept of 1
MEN142	.14	.35	2.49	2.11	0	1	Produces multiple-word utterances i
MEN143	.46	.50	-2.01	.16	0	1	Recalls geometric forms
MEN144	.55	.50	-2.00	-.20	0	1	Discriminates pictures 1
MEN145	.33	.47	-1.49	.73	0	1	Compares sizes
MEN146	.31	.46	-1.33	.83	0	1	Counts
MEN147	.36	.48	-1.68	.59	0	1	Compares masses
MEN148	.28	.45	-1.03	.99	0	1	Uses past tense
MEN149	.40	.49	-1.87	.41	0	1	Builds bridge
MEN150	.52	.50	-2.03	-.08	0	1	Builds wall
MEN151	.39	.49	-1.83	.46	0	1	Discriminates pictures 2
MEN152	.26	.44	-.78	1.11	0	1	Repeats 3 number sequences
MEN153	.26	.44	-.78	1.11	0	1	Understands 4 prepositions
MEN154	.14	.35	2.49	2.11	0	1	Identifies gender
MOT78	.93	.26	9.91	-3.42	0	1	Jumps off floor
MOT79	.84	.37	1.58	-1.88	0	1	Walks up stairs alone, placing both
MOT80	.74	.44	-.78	-1.11	0	1	Walks down stairs alone, placing bo
MOT81	.86	.35	2.49	-2.11	0	1	Jumps from bottom step
MOT82	.75	.44	-.64	-1.17	0	1	Stands alone on right foot
MOT83	.70	.46	-1.24	-.89	0	1	Stands alone on left foot
MOT84	.74	.44	-.78	-1.11	0	1	Walks forward on line
MOT85	.68	.47	-1.41	-.78	0	1	Walks backward close to line
MOT86	.70	.46	-1.24	-.89	0	1	Swings legs to kick ball
MOT87	.69	.46	-1.33	-.83	0	1	Jumps distance of 4 inches
MOT88	.63	.49	-1.74	-.55	0	1	Laces 3 beads
MOT89	.71	.46	-1.14	-.94	0	1	Walks on tiptoe for 4 steps
MOT90	.60	.49	-1.87	-.41	0	1	Grasps pencil at nearest end
MOT91	.50	.50	-2.04	.00	0	1	Imitates hand movements
MOT92	.50	.50	-2.04	.00	0	1	Tactilely discriminates shapes
MOT93	.48	.50	-2.03	.08	0	1	Manipulates pencil in hand

MOT94	.52	.50	-2.03	-.08	0	1	Stands up 3
MOT95	.65	.48	-1.63	-.64	0	1	Walks up stairs, alternating feet
MOT96	.40	.49	-1.87	.41	0	1	Copies circle

Appendix A.14
Item Difficulty (P) Values and Descriptive Statistics for Age 30 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN131	.88	.33	3.71	-2.37	0	1	Attends to story
MEN132	.94	.24	12.40	-3.76	0	1	Places beads in tube in 120 seconds
MEN133	.89	.31	4.50	-2.53	0	1	Names 5 pictures
MEN134	.91	.29	6.59	-2.91	0	1	Displays verbal comprehension
MEN135	.83	.38	1.21	-1.78	0	1	Builds tower of 8 cubes
MEN136	.81	.39	.59	-1.60	0	1	Poses question(s)
MEN137	.75	.44	-.64	-1.17	0	1	Matches 4 colors
MEN138	.78	.42	-.12	-1.37	0	1	Builds train of cubes
MEN139	.74	.44	-.78	-1.11	0	1	Imitates vertical and horizontal st
MEN140	.74	.44	-.78	-1.11	0	1	Understands 2 prepositions
MEN141	.59	.49	-1.90	-.37	0	1	Understands concept of 1
MEN142	.60	.49	-1.87	-.41	0	1	Produces multiple-word utterances i
MEN143	.58	.50	-1.93	-.33	0	1	Recalls geometric forms
MEN144	.69	.46	-1.33	-.83	0	1	Discriminates pictures 1
MEN145	.60	.49	-1.87	-.41	0	1	Compares sizes
MEN146	.57	.50	-1.96	-.29	0	1	Counts
MEN147	.50	.50	-2.04	.00	0	1	Compares masses
MEN148	.45	.50	-2.00	.20	0	1	Uses past tense
MEN149	.43	.50	-1.96	.29	0	1	Builds bridge
MEN150	.41	.49	-1.90	.37	0	1	Builds wall
MEN151	.50	.50	-2.04	.00	0	1	Discriminates pictures 2
MEN152	.39	.49	-1.83	.46	0	1	Repeats 3 number sequences
MEN153	.49	.50	-2.04	.04	0	1	Understands 4 prepositions
MEN154	.41	.49	-1.90	.37	0	1	Identifies gender
MEN155	.28	.45	-1.03	.99	0	1	Names 4 colors
MEN156	.08	.27	8.04	3.14	0	1	Understands concept of more
MEN157	.20	.40	.33	1.52	0	1	Counts 1-to-1 correspondence
MEN158	.08	.27	8.04	3.14	0	1	Understands anothers perspective 1
MOT84	.84	.37	1.58	-1.88	0	1	Walks forward on line
MOT85	.85	.36	2.00	-1.99	0	1	Walks backward close to line
MOT86	.82	.39	.88	-1.69	0	1	Swings legs to kick ball
MOT87	.83	.38	1.21	-1.78	0	1	Jumps distance of 4 inches
MOT88	.75	.44	-.64	-1.17	0	1	Laces 3 beads
MOT89	.70	.46	-1.24	-.89	0	1	Walks on tiptoe for 4 steps
MOT90	.77	.42	-.31	-1.30	0	1	Grasps pencil at nearest end
MOT91	.61	.49	-1.83	-.46	0	1	Imitates hand movements
MOT92	.49	.50	-2.04	.04	0	1	Tactilely discriminates shapes
MOT93	.55	.50	-2.00	-.20	0	1	Manipulates pencil in hand
MOT94	.72	.45	-1.03	-.99	0	1	Stands up 3
MOT95	.38	.49	-1.78	.50	0	1	Walks up stairs, alternating feet
MOT96	.53	.50	-2.03	-.12	0	1	Copies circle
MOT97	.49	.50	-2.04	.04	0	1	Uses eye-hand coordination in tossi
MOT98	.40	.49	-1.87	.41	0	1	Imitates postures
MOT99	.30	.46	-1.24	.89	0	1	Walks on tiptoe for 9 feet
MOT100	.38	.49	-1.78	.50	0	1	Stops from a full run
MOT101	.19	.39	.59	1.60	0	1	Buttons 1 button

Appendix A.15
Item Difficulty (P) Values and Descriptive Statistics for Age 36 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN140	.98	.14	47.42	-6.96	0	1	Understands 2 prepositions
MEN141	.80	.40	.33	-1.52	0	1	Understands concept of 1
MEN142	.69	.46	-1.33	-.83	0	1	Produces multiple-word utterances i
MEN143	.81	.39	.59	-1.60	0	1	Recalls geometric forms
MEN144	.97	.17	29.90	-5.59	0	1	Discriminates pictures 1
MEN145	.79	.41	.09	-1.45	0	1	Compares sizes
MEN146	.73	.45	-.91	-1.05	0	1	Counts
MEN147	.69	.46	-1.33	-.83	0	1	Compares masses
MEN148	.57	.50	-1.96	-.29	0	1	Uses past tense
MEN149	.72	.45	-1.03	-.99	0	1	Builds bridge
MEN150	.80	.40	.33	-1.52	0	1	Builds wall
MEN151	.59	.49	-1.90	-.37	0	1	Discriminates pictures 2
MEN152	.65	.48	-1.63	-.64	0	1	Repeats 3 number sequences
MEN153	.53	.50	-2.03	-.12	0	1	Understands 4 prepositions
MEN154	.52	.50	-2.03	-.08	0	1	Identifies gender
MEN155	.54	.50	-2.01	-.16	0	1	Names 4 colors
MEN156	.46	.50	-2.01	.16	0	1	Understands concept of more
MEN157	.43	.50	-1.96	.29	0	1	Counts 1-to-1 correspondence
MEN158	.39	.49	-1.83	.46	0	1	Understands anothers perspective 1
MEN159	.63	.49	-1.74	-.55	0	1	Counts stable number order
MEN160	.37	.49	-1.74	.55	0	1	Remembers sequence
MEN161	.40	.49	-1.87	.41	0	1	Discriminates patterns
MEN162	.44	.50	-1.98	.25	0	1	Sorts pegs by color
MEN163	.36	.48	-1.68	.59	0	1	Discriminates sizes
MEN164	.22	.42	-.12	1.37	0	1	Counts cardinality
MEN165	.23	.42	-.31	1.30	0	1	Completes blue board in 30 seconds
MEN166	.32	.47	-1.41	.78	0	1	Identifies 3 incomplete pictures
MEN167	.21	.41	.09	1.45	0	1	Relates temporal sequence of events
MEN168	.30	.46	-1.24	.89	0	1	Completes patterns
MOT91	.78	.42	-.42	-1.37	0	1	Imitates hand movements
MOT92	.74	.44	-.78	-1.11	0	1	Tactilely discriminates shapes
MOT93	.71	.46	-1.14	-.94	0	1	Manipulates pencil in hand
MOT94	.70	.46	-1.24	-.89	0	1	Stands up 3
MOT95	.74	.44	-.78	-1.11	0	1	Walks up stairs, alternating feet
MOT96	.71	.46	-1.14	-.94	0	1	Copies circle
MOT97	.65	.48	-1.63	-.64	0	1	Uses eye-hand coordination in tossi
MOT98	.52	.50	-2.03	-.08	0	1	Imitates postures
MOT99	.55	.50	-2.00	-.20	0	1	Walks on tiptoe for 9 feet
MOT100	.53	.50	-2.03	-.12	0	1	Stops from a full run
MOT101	.50	.50	-2.04	.00	0	1	Buttons 1 button
MOT102	.43	.50	-1.96	.29	0	1	Stands alone on left foot for 4 sec
MOT103	.38	.49	-1.78	.50	0	1	Stands alone on right foot for 4 se
MOT104	.42	.50	-1.93	.33	0	1	Copies plus sign
MOT105	.21	.41	.09	1.45	0	1	Traces designs
MOT106	.48	.50	-2.03	.08	0	1	Jumps over rope

MOT107	.38	.49	-1.78	.50	0	1	Hops twice on 1 foot
MOT108	.42	.50	-1.93	.33	0	1	Walks down stairs, alternating feet
MOT109	.00	.00	.	.	0	0	Jumps distance of 24 inches
MOT110	.18	.39	.88	1.69	0	1	Hops 5 feet
MOT111	.09	.29	6.59	2.91	0	1	Copies square

Appendix A.16
Item Difficulty (P) Values and Descriptive Statistics for Age 42 (n=100)

Variable	Mean	Std Dev	Kurtosis	Skewness	Minimum	Maximum	Label
MEN146	.85	.36	2.00	-1.99	0	1	Counts
MEN147	.94	.24	12.40	-3.76	0	1	Compares masses
MEN148	.89	.31	4.50	-2.53	0	1	Uses past tense
MEN149	.87	.34	3.05	-2.23	0	1	Builds bridge
MEN150	.90	.30	5.44	-2.71	0	1	Builds wall
MEN151	.90	.30	5.44	-2.71	0	1	Discriminates pictures 2
MEN152	.80	.40	.33	-1.52	0	1	Repeats 3 number sequences
MEN153	.81	.39	.59	-1.60	0	1	Understands 4 prepositions
MEN154	.78	.42	-.12	-1.37	0	1	Identifies gender
MEN155	.65	.48	-1.63	-.64	0	1	Names 4 colors
MEN156	.64	.48	-1.68	-.59	0	1	Understands concept of more
MEN157	.71	.46	-1.14	-.94	0	1	Counts 1-to-1 correspondence
MEN158	.65	.48	-1.63	-.64	0	1	Understands anothers perspective 1
MEN159	.73	.45	-.91	-1.05	0	1	Counts stable number order
MEN160	.65	.48	-1.63	-.64	0	1	Remembers sequence
MEN161	.51	.50	-2.04	-.04	0	1	Discriminates patterns
MEN162	.81	.39	.59	-1.60	0	1	Sorts pegs by color
MEN163	.49	.50	-2.04	.04	0	1	Discriminates sizes
MEN164	.49	.50	-2.04	.04	0	1	Counts cardinality
MEN165	.55	.50	-2.00	-.20	0	1	Completes blue board in 30 seconds
MEN166	.65	.48	-1.63	-.64	0	1	Identifies 3 incomplete pictures
MEN167	.41	.49	-1.90	.37	0	1	Relates temporal sequence of events
MEN168	.36	.48	-1.68	.59	0	1	Completes patterns
MEN169	.50	.50	-2.04	.00	0	1	Finds most direct route on map
MEN170	.53	.50	-2.03	-.12	0	1	Finds alternate route on map
MEN171	.44	.50	-1.98	.25	0	1	Picks up 2 friends on map
MEN172	.56	.50	-1.98	-.25	0	1	Understands anothers perspective 2
MEN173	.51	.50	-2.04	-.04	0	1	Builds T
MEN174	.40	.49	-1.87	.41	0	1	Classifies objects
MEN175	.33	.47	-1.49	.73	0	1	Counts order invariance
MEN176	.32	.47	-1.41	.78	0	1	Builds steps
MEN177	.31	.46	-1.33	.83	0	1	Comprehends congruent and incongrue
MEN178	.23	.42	-.31	1.30	0	1	Solves bridge-building problem
MOT96	.83	.38	1.21	-1.78	0	1	Copies circle
MOT97	.81	.39	.59	-1.60	0	1	Uses eye-hand coordination in tossi
MOT98	.80	.40	.33	-1.52	0	1	Imitates postures
MOT99	.81	.39	.59	-1.60	0	1	Walks on tiptoe for 9 feet
MOT100	.80	.40	.33	-1.52	0	1	Stops from a full run
MOT101	.73	.45	-.91	-1.05	0	1	Buttons 1 button
MOT102	.72	.45	-1.03	-.99	0	1	Stands alone on left foot for 4 sec
MOT103	.74	.44	-.78	-1.11	0	1	Stands alone on right foot for 4 se
MOT104	.63	.49	-1.74	-.55	0	1	Copies plus sign
MOT105	.39	.49	-1.83	.46	0	1	Traces designs
MOT106	.63	.49	-1.74	-.55	0	1	Jumps over rope
MOT107	.66	.48	-1.56	-.69	0	1	Hops twice on 1 foot

MOT108	.58	.50	-1.93	-.33	0	1	Walks down stairs, alternating feet
MOT109	.50	.50	-2.04	.00	0	1	Jumps distance of 24 inches
MOT110	.36	.48	-1.68	.59	0	1	Hops 5 feet
MOT111	.19	.39	.59	1.60	0	1	Copies square

Appendix B.1.1

Reliability Analyses for **Age 2** (n=100; variables=25) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN13	13.9900	26.0100	.1833	.8509
MEN14	13.9800	25.8582	.2474	.8494
MEN15	13.9800	25.3531	.4242	.8455
MEN16	14.0100	25.1615	.4262	.8450
MEN17	14.2000	24.3030	.4681	.8427
MEN18	14.1800	24.2501	.4912	.8419
MEN19	14.1700	24.7082	.3907	.8455
MEN20	14.1000	25.4444	.2549	.8497
MEN21	14.1700	25.9203	.1177	.8547
MEN22	14.1000	25.7273	.1853	.8519
MEN23	14.4100	24.1231	.4641	.8428
MEN24	14.3000	24.6162	.3678	.8465
MEN25	14.3700	24.8415	.3139	.8486
MEN26	14.1700	24.7284	.3860	.8456
MEN27	14.4600	24.5135	.3863	.8458
MEN28	14.3700	24.6395	.3557	.8470
MEN29	14.4200	24.5289	.3792	.8461
MEN30	14.2900	22.9151	.7440	.8318
MEN31	14.1600	23.3883	.7130	.8341
MEN32	14.4600	24.6347	.3608	.8467
MEN33	14.4400	25.0368	.2754	.8500
MEN34	14.6700	23.7385	.6785	.8361
MEN35	14.6700	25.2940	.2859	.8488
MEN36	14.6300	24.7809	.3849	.8457
MEN37	14.6600	23.6610	.6865	.8356

α = 0.8506

Appendix B.1.2
Reliability Analyses for **Age 2** (n=100; y=15) **Motor Items**

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT7	8.7900	9.6423	.3941	.7831
MOT8	8.7300	9.9567	.3207	.7882
MOT9	8.7000	10.3333	.1770	.7964
MOT10	8.6600	10.4085	.1869	.7951
MOT11	8.8200	9.8057	.3057	.7898
MOT12	8.8400	10.0145	.2161	.7969
MOT13	8.8700	9.7708	.2921	.7914
MOT14	8.7800	10.1531	.1940	.7973
MOT15	8.9400	8.8044	.6198	.7631
MOT16	9.2500	9.0177	.5534	.7694
MOT17	8.9100	9.2544	.4639	.7773
MOT18	9.0200	8.9491	.5406	.7701
MOT19	9.2900	8.9757	.5958	.7661
MOT20	9.2200	9.1228	.4997	.7741
MOT21	9.3000	9.1414	.5375	.7713

α = 0.7941

Appendix B.1.3
Reliability Analyses for Age 2 (n=100; y=40) Both Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN13	23.5700	48.5304	.1188	.8656
MEN14	23.5600	47.8853	.2895	.8633
MEN15	23.5600	47.6428	.3513	.8624
MEN16	23.5900	47.3757	.3643	.8620
MEN17	23.7800	46.5774	.3667	.8616
MEN18	23.7600	46.1236	.4502	.8598
MEN19	23.7500	46.9167	.3235	.8625
MEN20	23.6800	47.1087	.3282	.8624
MEN21	23.7500	47.6843	.1977	.8652
MEN22	23.6800	47.6541	.2298	.8643
MEN23	23.9900	46.2928	.3769	.8614
MEN24	23.8800	47.1976	.2471	.8644
MEN25	23.9500	46.9571	.2777	.8637
MEN26	23.7500	46.4924	.3939	.8611
MEN27	24.0400	46.6853	.3217	.8627
MEN28	23.9500	46.2702	.3803	.8613
MEN29	24.0000	46.7677	.3062	.8631
MEN30	23.8700	44.8011	.6185	.8557
MEN31	23.7400	45.1640	.6265	.8561
MEN32	24.0400	47.0489	.2672	.8640
MEN33	24.0200	46.8481	.2954	.8633
MEN34	24.2500	45.1591	.6769	.8555
MEN35	24.2500	46.8763	.3632	.8617
MEN36	24.2100	46.7130	.3672	.8616
MEN37	24.2400	45.1539	.6663	.8556
MOT7	23.6800	47.2905	.2952	.8631
MOT8	23.6200	48.1774	.1634	.8652
MOT9	23.5900	48.1433	.1920	.8647
MOT10	23.5500	48.3510	.1833	.8647
MOT11	23.7100	47.4403	.2530	.8639
MOT12	23.7300	47.9971	.1521	.8660
MOT13	23.7600	46.8913	.3236	.8626
MOT14	23.6700	47.5971	.2455	.8640
MOT15	23.8300	46.2435	.4030	.8608
MOT16	24.1400	45.7176	.4975	.8587
MOT17	23.8000	46.8081	.3230	.8626
MOT18	23.9100	46.5878	.3353	.8624
MOT19	24.1800	46.5935	.3724	.8615
MOT20	24.1100	45.9373	.4512	.8597
MOT21	24.1900	46.5595	.3828	.8613

α = 0.8651

Appendix B.2.1

Reliability Analyses for **Age 3** (n=100; variables=21) **Mental Items**

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN20	12.1900	17.3878	.3136	.8241
MEN21	12.1700	17.4355	.3265	.8238
MEN22	12.2900	16.6524	.4482	.8182
MEN23	12.3900	16.9878	.2952	.8257
MEN24	12.3200	16.6238	.4326	.8188
MEN25	12.3300	17.0920	.2914	.8256
MEN26	12.2100	17.3191	.3128	.8241
MEN27	12.5000	16.6768	.3505	.8233
MEN28	12.3700	17.1647	.2546	.8276
MEN29	12.6200	16.4804	.3986	.8207
MEN30	12.1900	16.6403	.6011	.8138
MEN31	12.1300	17.3062	.4967	.8200
MEN32	12.3800	16.7632	.3597	.8225
MEN33	12.3400	16.5297	.4464	.8181
MEN34	12.5200	16.6764	.3483	.8234
MEN35	12.5900	16.5676	.3740	.8220
MEN36	12.6000	16.7475	.3287	.8245
MEN37	12.7300	16.5829	.3969	.8206
MEN38	12.7800	16.6178	.4096	.8199
MEN39	12.8100	15.6504	.7178	.8046
MEN40	12.9400	16.6024	.5925	.8138

α = 0.8279

Appendix B.2.2
Reliability Analyses for **Age 3** (n=100; v=19) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT11	12.3400	15.8024	.3329	.8519
MOT12	12.3600	16.3135	.0246	.8596
MOT13	12.3600	15.8287	.2626	.8535
MOT14	12.3200	16.0178	.2791	.8535
MOT15	12.3400	15.9034	.2741	.8533
MOT16	12.3600	15.7681	.2928	.8527
MOT17	12.5100	14.9797	.3963	.8494
MOT18	12.4800	14.8178	.4800	.8459
MOT19	12.6000	14.4040	.5130	.8442
MOT20	12.5600	14.3095	.5692	.8415
MOT21	12.5400	15.0590	.3499	.8517
MOT22	12.9700	13.9890	.6334	.8381
MOT23	12.5600	15.1378	.3149	.8534
MOT24	12.6700	14.0415	.5883	.8403
MOT25	12.8100	14.3171	.4898	.8456
MOT26	12.9200	14.0541	.5884	.8403
MOT27	12.7600	13.7398	.6558	.8366
MOT28	12.9300	13.9647	.6192	.8387
MOT29	12.8300	14.0011	.5811	.8407

α = 0.8541

Appendix B.2.3
Reliability Analyses for **Age 3** (n=100; v=40) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN20	25.4800	44.5349	.3418	.8671
MEN21	25.4600	44.7964	.3083	.8676
MEN22	25.5800	43.7612	.3989	.8658
MEN23	25.6800	43.9370	.3178	.8675
MEN24	25.6100	44.1191	.3154	.8675
MEN25	25.6200	44.2582	.2863	.8681
MEN26	25.5000	45.2222	.1680	.8698
MEN27	25.7900	44.3090	.2378	.8695
MEN28	25.6600	43.5398	.3915	.8659
MEN29	25.9100	43.8605	.3052	.8680
MEN30	25.4800	43.9087	.4890	.8648
MEN31	25.4200	44.7309	.4209	.8666
MEN32	25.6700	44.6678	.2008	.8700
MEN33	25.6300	43.4476	.4225	.8653
MEN34	25.8100	43.9534	.2909	.8683
MEN35	25.8800	43.9653	.2875	.8684
MEN36	25.8900	43.7757	.3170	.8677
MEN37	26.0200	43.3531	.4070	.8656
MEN38	26.0700	44.2476	.2763	.8684
MEN39	26.1000	42.6162	.5770	.8620
MEN40	26.2300	43.5930	.5432	.8638
MOT11	25.4100	45.4161	.2262	.8688
MOT12	25.4300	45.6415	.1225	.8700
MOT13	25.4300	45.7223	.0991	.8703
MOT14	25.3900	45.5130	.2547	.8687
MOT15	25.4100	45.3555	.2468	.8686
MOT16	25.4300	44.8940	.3410	.8674
MOT17	25.5800	43.7006	.4102	.8656
MOT18	25.5500	44.1894	.3409	.8669
MOT19	25.6700	43.0516	.4695	.8642
MOT20	25.6300	43.5890	.3978	.8658
MOT21	25.6100	44.0383	.3296	.8672
MOT22	26.0400	42.5438	.5507	.8623
MOT23	25.6300	44.6193	.2203	.8695
MOT24	25.7400	43.0832	.4389	.8648
MOT25	25.8800	43.2986	.3906	.8660
MOT26	25.9900	42.8585	.4781	.8639
MOT27	25.8300	42.8698	.4583	.8643
MOT28	26.0000	42.5051	.5395	.8625
MOT29	25.9000	42.5354	.5120	.8631

α = 0.8696

Appendix B.3.1

Reliability Analyses for **Age 4** (n=100; variables=23) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN30	13.2700	27.1284	.2000	.8840
MEN31	13.2800	26.9309	.2578	.8831
MEN32	13.2900	27.4403	.0588	.8865
MEN33	13.4400	26.5519	.2184	.8852
MEN34	13.4900	25.7878	.3690	.8814
MEN35	13.3500	26.2096	.3785	.8808
MEN36	13.4300	26.3486	.2716	.8837
MEN37	13.4500	25.6439	.4266	.8797
MEN38	13.5000	24.6768	.6175	.8741
MEN39	13.6000	25.1717	.4616	.8789
MEN40	13.5700	25.7829	.3403	.8826
MEN41	13.5100	25.7272	.3732	.8814
MEN42	13.6000	24.7677	.5482	.8761
MEN43	13.7100	24.3494	.6212	.8737
MEN44	13.7300	24.5829	.5719	.8753
MEN45	13.7100	23.5817	.7885	.8680
MEN46	13.6900	25.9736	.2847	.8846
MEN47	13.3700	25.1849	.6387	.8746
MEN48	13.7200	23.5774	.7897	.8680
MEN49	14.0100	24.7777	.6855	.8729
MEN50	14.0200	24.8885	.6708	.8734
MEN51	13.8700	25.7708	.3486	.8822
MEN52	14.0100	24.7777	.6855	.8729

α = 0.8832

Appendix B.3.2

Reliability Analyses for **Age 4** (n=100; v=19) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT17	10.6600	19.6610	.0662	.8683
MOT18	10.6900	19.1656	.2720	.8649
MOT19	10.7500	18.5732	.3947	.8616
MOT20	10.6900	19.2464	.2329	.8657
MOT21	10.8400	18.7418	.2487	.8668
MOT22	11.0800	17.2259	.5578	.8550
MOT23	10.7800	19.2036	.1458	.8693
MOT24	10.9000	17.6667	.5133	.8570
MOT25	10.9700	17.3627	.5549	.8551
MOT26	11.1700	17.5567	.4725	.8588
MOT27	11.0200	17.5349	.4910	.8580
MOT28	11.1700	17.5163	.4827	.8584
MOT29	10.9700	17.5849	.4957	.8577
MOT30	11.2400	17.6186	.4695	.8589
MOT31	11.2700	17.2496	.5761	.8542
MOT32	11.2400	16.8509	.6708	.8498
MOT33	11.3400	17.1762	.6367	.8518
MOT34	11.3300	17.1728	.6303	.8520
MOT35	11.2300	16.9062	.6526	.8506

α = 0.8653

Appendix B.3.3

Reliability Analyses for **Age 4** (n=100; v=42) **Both Item Sets**

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN30	24.9000	64.9596	.2279	.9018
MEN31	24.9100	64.8908	.2267	.9019
MEN32	24.9200	65.7915	.0062	.9037
MEN33	25.0700	63.9647	.2586	.9019
MEN34	25.1200	63.4400	.3130	.9013
MEN35	24.9800	64.0400	.3103	.9011
MEN36	25.0600	64.1782	.2311	.9022
MEN37	25.0800	63.2057	.3668	.9005
MEN38	25.1300	61.8112	.5403	.8981
MEN39	25.2300	62.3607	.4252	.8997
MEN40	25.2000	62.4242	.4245	.8997
MEN41	25.1400	63.0913	.3540	.9007
MEN42	25.2300	62.2597	.4386	.8995
MEN43	25.3400	61.2368	.5600	.8976
MEN44	25.3600	62.1923	.4355	.8996
MEN45	25.3400	60.2065	.6969	.8955
MEN46	25.3200	63.3915	.2814	.9020
MEN47	25.0000	62.3030	.5939	.8979
MEN48	25.3500	60.1288	.7074	.8953
MEN49	25.6400	62.4549	.5157	.8986
MEN50	25.6500	62.4924	.5206	.8986
MEN51	25.5000	62.7778	.3829	.9003
MEN52	25.6400	62.4549	.5157	.8986
MOT17	24.8700	65.5688	.1063	.9026
MOT18	24.9000	64.7576	.2808	.9015
MOT19	24.9600	64.2004	.3031	.9012
MOT20	24.9000	65.1616	.1751	.9022
MOT21	25.0500	63.8864	.2811	.9016
MOT22	25.2900	62.4908	.3988	.9001
MOT23	24.9900	64.8181	.1638	.9027
MOT24	25.1100	63.0686	.3705	.9005
MOT25	25.1800	62.2905	.4493	.8994
MOT26	25.3800	62.4602	.4019	.9001
MOT27	25.2300	62.2597	.4386	.8995
MOT28	25.3800	61.9349	.4702	.8990
MOT29	25.1800	63.2198	.3232	.9012
MOT30	25.4500	62.4924	.4078	.9000
MOT31	25.4800	60.9390	.6269	.8967
MOT32	25.4500	62.0076	.4722	.8990
MOT33	25.5500	62.0884	.5005	.8986
MOT34	25.5400	62.2711	.4691	.8991
MOT35	25.4400	61.6226	.5211	.8983

α = 0.9022

Appendix B.4.1

Reliability Analyses for **Age 5** (n=100; variables=25) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN42	13.0500	30.1086	.3943	.8888
MEN43	13.0900	29.6383	.4549	.8875
MEN44	13.1100	29.2908	.5167	.8862
MEN45	13.1500	29.0379	.5228	.8858
MEN46	13.0500	29.7652	.5120	.8870
MEN47	13.1200	30.5511	.1721	.8929
MEN48	13.1600	29.5701	.3818	.8889
MEN49	13.1800	29.4420	.3946	.8886
MEN50	13.2500	28.9773	.4491	.8874
MEN51	13.3100	29.9736	.2230	.8934
MEN52	13.4200	29.8218	.2364	.8935
MEN53	13.4000	28.4242	.5072	.8860
MEN54	13.3800	29.1471	.3693	.8898
MEN55	13.3100	29.0443	.4076	.8886
MEN56	13.4900	29.1817	.3556	.8903
MEN57	13.5600	27.9055	.6152	.8830
MEN58	13.5900	28.8706	.4300	.8881
MEN59	13.6700	27.2940	.8014	.8781
MEN60	13.6700	27.2940	.8014	.8781
MEN61	13.4300	28.6920	.4509	.8876
MEN62	13.7300	27.7546	.7570	.8798
MEN63	13.6400	29.3842	.3426	.8903
MEN64	13.8400	28.9034	.6453	.8838
MEN65	13.8400	28.9034	.6453	.8838
MEN66	13.8400	28.9034	.6453	.8838

α = 0.8910

Appendix B.4.2
Reliability Analyses for **Age 5** (n=100; v=17) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT25	8.4300	13.0355	.3647	.8175
MOT26	8.5300	12.8981	.2980	.8207
MOT27	8.4300	13.4799	.1579	.8257
MOT28	8.6500	12.1692	.4682	.8110
MOT29	8.4600	13.0186	.3229	.8191
MOT30	8.5500	12.6540	.3690	.8169
MOT31	8.7600	11.8408	.5350	.8065
MOT32	8.9100	12.2847	.3996	.8157
MOT33	8.6500	12.3308	.4160	.8144
MOT34	9.0700	12.4900	.3967	.8154
MOT35	8.6900	12.2565	.4237	.8140
MOT36	8.8700	11.5486	.6229	.8002
MOT37	8.9800	12.8481	.2451	.8254
MOT38	8.8000	11.7576	.5556	.8050
MOT39	9.2000	12.6061	.5000	.8110
MOT40	9.1500	12.1894	.5867	.8053
MOT41	9.1500	12.5328	.4530	.8124
MOT41	9.1500	12.5328	.4530	.8124

α = 0.8231

Appendix B.4.3
Reliability Analyses for **Age 5** (n=100; v=42) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN42	22.3800	73.3491	.4068	.9188
MEN43	22.4200	72.5895	.4721	.9182
MEN44	22.4400	72.0065	.5399	.9175
MEN45	22.4800	71.6865	.5334	.9174
MEN46	22.3800	72.9046	.5035	.9182
MEN47	22.4500	73.9470	.2021	.9204
MEN48	22.4900	72.4342	.4073	.9186
MEN49	22.5100	72.5353	.3758	.9189
MEN50	22.5800	72.0844	.3961	.9188
MEN51	22.6400	72.7580	.2879	.9201
MEN52	22.7500	73.3409	.2023	.9213
MEN53	22.7300	70.5021	.5474	.9170
MEN54	22.7100	71.9858	.3688	.9192
MEN55	22.6400	71.5661	.4383	.9184
MEN56	22.8200	71.6440	.4032	.9188
MEN57	22.8900	69.9979	.6143	.9162
MEN58	22.9200	71.4683	.4385	.9184
MEN59	23.0000	69.2323	.7670	.9145
MEN60	23.0000	69.2323	.7670	.9145
MEN61	22.7600	71.7398	.3927	.9190
MEN62	23.0600	69.9964	.7160	.9153
MEN63	22.9700	72.3324	.3443	.9194
MEN64	23.1700	71.8395	.5881	.9172
MEN65	23.1700	71.8395	.5881	.9172
MEN66	23.1700	71.8395	.5881	.9172
MOT25	22.4000	73.7576	.2848	.9196
MOT26	22.5000	72.9798	.3176	.9195
MOT27	22.4000	74.1212	.2140	.9202
MOT28	22.6200	71.3289	.4766	.9179
MOT29	22.4300	72.8738	.4047	.9187
MOT30	22.5200	73.0400	.2965	.9198
MOT31	22.7300	70.1991	.5849	.9166
MOT32	22.8800	71.4400	.4338	.9184
MOT33	22.6200	72.1168	.3751	.9191
MOT34	23.0400	71.6954	.4599	.9181
MOT35	22.6600	71.8428	.3971	.9189
MOT36	22.8400	70.9034	.4942	.9177
MOT37	22.9500	73.7045	.1687	.9215
MOT38	22.7700	70.0779	.5946	.9165
MOT39	23.1700	72.2435	.5161	.9178
MOT40	23.1200	71.3188	.5912	.9169
MOT41	23.1200	72.1067	.4678	.9181

α = 0.9200

Appendix B.5.1

Reliability Analyses for **Age 6** (n=100; variables=25) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN49	13.5800	38.3269	.2971	.9209
MEN50	13.6100	37.8565	.3732	.9200
MEN51	13.5800	38.1451	.3413	.9204
MEN52	13.5800	37.9632	.3858	.9198
MEN53	13.6400	37.1418	.4967	.9182
MEN54	13.6600	37.3580	.4314	.9192
MEN55	13.5200	38.2723	.4243	.9194
MEN56	13.6100	38.3211	.2691	.9215
MEN57	13.6400	37.2226	.4794	.9185
MEN58	13.7800	37.1026	.4096	.9200
MEN59	13.7800	35.2036	.7592	.9133
MEN60	13.8400	38.0549	.2297	.9235
MEN61	13.9200	35.6703	.6279	.9158
MEN62	13.9700	36.8375	.4257	.9199
MEN63	13.9800	36.5248	.4796	.9188
MEN64	13.9900	34.2726	.8799	.9106
MEN65	13.9900	34.2726	.8799	.9106
MEN66	13.9800	34.2824	.8768	.9107
MEN67	13.9200	37.5693	.3030	.9223
MEN68	13.9900	34.2726	.8799	.9106
MEN69	14.1000	34.8788	.8081	.9123
MEN70	14.1700	35.4961	.7410	.9138
MEN71	14.3100	37.1858	.5589	.9174
MEN72	14.2600	36.4570	.6452	.9158
MEN73	14.4000	38.6667	.3560	.9202

α = 0.9205

Appendix B.5.2
Reliability Analyses for **Age 6** (n=100; y=21) **Motor Items**

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT28	11.5800	20.3673	.4340	.8408
MOT29	11.4900	21.7070	.0326	.8503
MOT30	11.5900	20.9110	.2423	.8467
MOT31	11.6600	19.9640	.4576	.8394
MOT32	11.6500	20.4116	.3392	.8438
MOT33	11.7400	19.7903	.4454	.8397
MOT34	11.8400	19.2065	.5490	.8350
MOT35	11.8600	18.9701	.6018	.8325
MOT36	11.9500	19.1389	.5491	.8349
MOT37	11.9100	19.7595	.4031	.8416
MOT38	11.6900	20.8019	.2093	.8488
MOT39	11.7700	20.5021	.2552	.8477
MOT40	11.8600	19.6368	.4393	.8399
MOT41	11.9100	20.2039	.3000	.8463
MOT42	11.8600	19.5762	.4538	.8393
MOT43	11.9300	19.7829	.3964	.8419
MOT44	12.0000	19.8384	.3855	.8424
MOT45	12.0500	19.4217	.4934	.8375
MOT46	12.1900	19.4888	.5453	.8356
MOT47	12.1600	18.9236	.6739	.8299
MOT48	12.3100	20.1151	.5015	.8386

α = 0.8472

Appendix B.5.3

Reliability Analyses for **Age 6** (n=100; y=46) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN49	26.0300	93.6052	.2699	.9275
MEN50	26.0600	92.9257	.3412	.9271
MEN51	26.0300	92.8577	.3858	.9268
MEN52	26.0300	93.1809	.3356	.9271
MEN53	26.0900	91.7999	.4672	.9261
MEN54	26.1100	91.7757	.4515	.9262
MEN55	25.9700	93.1405	.4604	.9265
MEN56	26.0600	93.4307	.2693	.9276
MEN57	26.0900	91.2140	.5464	.9255
MEN58	26.2300	91.5526	.4101	.9266
MEN59	26.2300	88.6637	.7413	.9235
MEN60	26.2900	92.8544	.2530	.9281
MEN61	26.3700	89.7910	.5725	.9250
MEN62	26.4200	90.2663	.5205	.9256
MEN63	26.4300	91.5203	.3869	.9269
MEN64	26.4400	87.8246	.7892	.9229
MEN65	26.4400	87.8246	.7892	.9229
MEN66	26.4300	87.7223	.7994	.9227
MEN67	26.3700	92.7203	.2601	.9281
MEN68	26.4400	87.8246	.7892	.9229
MEN69	26.5500	89.0581	.6849	.9240
MEN70	26.6200	89.6521	.6587	.9244
MEN71	26.7600	92.1842	.4747	.9261
MEN72	26.7100	91.1171	.5596	.9254
MEN73	26.8500	93.8662	.3701	.9271
MOT28	26.0300	92.4536	.4488	.9263
MOT29	25.9400	95.1479	.0776	.9283
MOT30	26.0400	93.3317	.3015	.9273
MOT31	26.1100	91.6746	.4647	.9261
MOT32	26.1000	92.2323	.4003	.9266
MOT33	26.1900	91.6100	.4200	.9265
MOT34	26.2900	90.7332	.4831	.9259
MOT35	26.3100	91.0241	.4470	.9263
MOT36	26.4000	90.8889	.4533	.9262
MOT37	26.3600	91.4246	.3977	.9268
MOT38	26.1400	92.9903	.2791	.9277
MOT39	26.2200	93.5471	.1894	.9286
MOT40	26.3100	91.3272	.4142	.9266
MOT41	26.3600	91.6065	.3783	.9270
MOT42	26.3100	90.8827	.4624	.9261
MOT43	26.3800	92.2986	.3041	.9277
MOT44	26.4500	92.6540	.2681	.9281
MOT45	26.5000	91.3232	.4165	.9266
MOT46	26.6400	91.5257	.4463	.9263
MOT47	26.6100	90.6443	.5335	.9255
MOT48	26.7600	92.4671	.4318	.9264

α = 0.9277

Appendix B.6.1

Reliability Analyses for **Age 8** (n=100; variables=24) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN59	12.4800	29.2016	.4533	.8992
MEN60	12.4800	29.6663	.3393	.9015
MEN61	12.3400	30.4085	.3661	.9012
MEN62	12.4900	30.3534	.1688	.9050
MEN63	12.4200	29.1349	.5675	.8974
MEN64	12.5100	29.4443	.3670	.9011
MEN65	12.4900	29.3231	.4131	.9001
MEN66	12.5500	28.9571	.4475	.8994
MEN67	12.6400	29.3236	.3282	.9026
MEN68	12.5000	28.1919	.6767	.8944
MEN69	12.5300	27.9082	.7061	.8936
MEN70	12.7200	28.9309	.3871	.9014
MEN71	12.9400	27.0267	.7941	.8907
MEN72	12.8700	28.5587	.4581	.8995
MEN73	12.9400	27.0267	.7941	.8907
MEN74	12.6000	27.4747	.7364	.8924
MEN75	13.0400	27.5539	.7550	.8922
MEN76	13.1900	29.2666	.5517	.8978
MEN77	12.8900	28.9070	.3934	.9012
MEN78	12.9700	28.8981	.4174	.9004
MEN79	12.9000	29.5859	.2640	.9044
MEN80	13.1000	28.1111	.6966	.8940
MEN81	13.0300	27.4839	.7608	.8920
MEN82	13.2800	30.8299	.2513	.9026

α = 0.9021

Appendix B.6.2
Reliability Analyses for **Age 8** (n=100; y=19) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT42	11.1900	17.9938	.1518	.8496
MOT43	11.0700	17.5001	.3994	.8392
MOT44	11.1900	17.4282	.3100	.8428
MOT45	11.1700	16.8496	.4940	.8347
MOT46	11.2000	16.5657	.5528	.8319
MOT47	11.3000	16.3737	.5475	.8317
MOT48	11.1400	18.0004	.1706	.8480
MOT49	11.2200	17.5067	.2737	.8446
MOT50	11.1000	17.8485	.2440	.8447
MOT51	11.1300	17.0839	.4616	.8364
MOT52	11.3000	15.8485	.6932	.8242
MOT53	11.4400	16.4711	.4953	.8343
MOT54	11.4600	16.1095	.5910	.8293
MOT55	11.4000	16.4444	.5042	.8339
MOT56	11.3800	17.3693	.2707	.8457
MOT57	11.1800	17.3208	.3467	.8412
MOT58	11.7600	16.9519	.5167	.8342
MOT59	11.6700	16.3647	.6039	.8294
MOT60	11.6200	16.3592	.5708	.8307

α = 0.8447

Appendix B.6.3
Reliability Analyses for Age 8 (n=100; y=43) Both Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN59	24.4200	69.7410	.3965	.9094
MEN60	24.4200	70.3875	.2948	.9104
MEN61	24.2800	71.5370	.2615	.9107
MEN62	24.4300	71.5001	.1187	.9123
MEN63	24.3600	69.5257	.5168	.9084
MEN64	24.4500	69.9268	.3436	.9100
MEN65	24.4300	69.9243	.3590	.9098
MEN66	24.4900	69.1211	.4334	.9090
MEN67	24.5800	70.0238	.2756	.9110
MEN68	24.4400	68.4913	.5702	.9075
MEN69	24.4700	68.0294	.6075	.9069
MEN70	24.6600	69.1560	.3691	.9099
MEN71	24.8800	66.4299	.7355	.9049
MEN72	24.8100	68.6201	.4342	.9090
MEN73	24.8800	66.4299	.7355	.9049
MEN74	24.5400	67.4428	.6335	.9064
MEN75	24.9800	67.4137	.6684	.9061
MEN76	25.1300	69.4476	.5534	.9082
MEN77	24.8300	69.1728	.3685	.9099
MEN78	24.9100	69.1534	.3906	.9095
MEN79	24.8400	69.5903	.3182	.9105
MEN80	25.0400	67.9782	.6497	.9066
MEN81	24.9700	67.2011	.6899	.9058
MEN82	25.2200	71.7693	.2759	.9108
MOT42	24.4900	71.0403	.1659	.9121
MOT43	24.3700	70.1142	.3919	.9095
MOT44	24.4900	70.3938	.2552	.9110
MOT45	24.4700	69.1203	.4476	.9088
MOT46	24.5000	69.0808	.4328	.9090
MOT47	24.6000	68.6869	.4411	.9089
MOT48	24.4400	70.4307	.2748	.9107
MOT49	24.5200	70.1309	.2795	.9108
MOT50	24.4000	70.6667	.2655	.9107
MOT51	24.4300	70.1668	.3217	.9102
MOT52	24.6000	68.1616	.5087	.9080
MOT53	24.7400	68.9216	.3922	.9096
MOT54	24.7600	67.8812	.5213	.9078
MOT55	24.7000	68.7374	.4164	.9092
MOT56	24.6800	69.7754	.2907	.9109
MOT57	24.4800	70.4137	.2567	.9110
MOT58	25.0600	69.5923	.4200	.9091
MOT59	24.9700	68.1708	.5533	.9075
MOT60	24.9200	68.8016	.4404	.9089

α = 0.9111

Appendix B.7.1

Reliability Analyses for **Age 10** (n=100; variables=24) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN64	14.2100	15.7433	.3865	.7516
MEN65	14.2100	15.8645	.3413	.7538
MEN66	14.2000	16.2020	.2272	.7594
MEN67	14.1000	16.3333	.4126	.7563
MEN68	14.2200	15.9107	.3126	.7551
MEN69	14.2300	15.9769	.2790	.7568
MEN70	14.2600	15.9721	.2560	.7580
MEN71	14.3600	15.4044	.3693	.7510
MEN72	14.3700	15.3668	.3754	.7505
MEN73	14.3400	15.3378	.3999	.7491
MEN74	14.4600	14.8974	.4748	.7432
MEN75	14.4500	14.9975	.4497	.7451
MEN76	14.4300	15.1769	.4057	.7483
MEN77	14.4800	15.5855	.2830	.7568
MEN78	14.4500	15.4419	.3272	.7537
MEN79	14.4700	15.9890	.1785	.7640
MEN80	14.4800	15.2622	.3697	.7507
MEN81	14.5300	15.4839	.3043	.7554
MEN82	14.5400	15.8873	.1990	.7628
MEN83	14.6400	16.0509	.1595	.7654
MEN84	14.6100	15.5332	.2913	.7563
MEN85	14.7000	16.1313	.1456	.7660
MEN86	14.8100	15.7918	.2706	.7573
MEN87	15.0600	16.7640	.1959	.7625

α = 0.7633

Appendix B.7.2
Reliability Analyses for **Age 10** (n=100; v=14) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT51	7.1200	8.9956	.2399	.8013
MOT52	7.1800	8.6137	.3500	.7952
MOT53	7.2600	8.4368	.3346	.7964
MOT54	7.2500	8.1692	.4714	.7862
MOT55	7.3600	8.1519	.3835	.7934
MOT56	7.3200	8.4016	.3043	.7996
MOT57	7.2600	8.6388	.2435	.8031
MOT58	7.8200	7.7046	.6062	.7739
MOT59	7.8000	7.9798	.4680	.7859
MOT60	7.3700	7.7708	.5358	.7797
MOT61	7.6600	7.4388	.6214	.7709
MOT62	7.8400	7.8731	.5505	.7791
MOT63	7.8600	8.3236	.3673	.7941
MOT64	7.8100	8.1959	.3837	.7931

α = 0.8019

Appendix B.7.3
Reliability Analyses for **Age 10** (n=100; y=38) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN64	22.2800	34.6077	.3787	.8254
MEN65	22.2800	34.8703	.3135	.8269
MEN66	22.2700	35.6536	.1277	.8311
MEN67	22.1700	35.5163	.3609	.8279
MEN68	22.2900	34.8746	.3019	.8271
MEN69	22.3000	35.2828	.1975	.8297
MEN70	22.3300	35.2334	.1911	.8300
MEN71	22.4300	34.0860	.3736	.8249
MEN72	22.4400	33.7640	.4310	.8231
MEN73	22.4100	34.1635	.3682	.8251
MEN74	22.5300	33.3829	.4696	.8216
MEN75	22.5200	33.9491	.3687	.8250
MEN76	22.5000	34.3131	.3074	.8270
MEN77	22.5500	34.2298	.3128	.8268
MEN78	22.5200	34.5754	.2562	.8286
MEN79	22.5400	35.3216	.1229	.8330
MEN80	22.5500	33.7854	.3922	.8242
MEN81	22.6000	34.2626	.3018	.8272
MEN82	22.6100	34.8060	.2071	.8304
MEN83	22.7100	35.0161	.1731	.8314
MEN84	22.6800	33.8562	.3733	.8248
MEN85	22.7700	35.4112	.1102	.8333
MEN86	22.8800	34.5107	.3047	.8270
MEN87	23.1300	36.0132	.2166	.8301
MOT51	22.1900	35.5494	.2626	.8286
MOT52	22.2500	34.5530	.4413	.8244
MOT53	22.3300	34.3243	.3904	.8247
MOT54	22.3200	34.0986	.4514	.8232
MOT55	22.4300	33.9041	.4088	.8238
MOT56	22.3900	34.9272	.2268	.8292
MOT57	22.3300	35.4759	.1388	.8313
MOT58	22.8900	33.7555	.4624	.8223
MOT59	22.8700	34.2961	.3421	.8259
MOT60	22.4400	33.6428	.4545	.8223
MOT61	22.7300	33.5324	.4378	.8226
MOT62	22.9100	34.2645	.3716	.8251
MOT63	22.9300	35.3183	.1639	.8308
MOT64	22.8800	34.0057	.4052	.8240

α = 0.8307

Appendix B.8.1

Reliability Analyses for **Age 12** (n=100; variables=30) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN71	16.6100	33.1292	.2844	.8769
MEN72	16.5600	32.7539	.4601	.8739
MEN73	16.6200	32.5410	.4177	.8743
MEN74	16.5300	33.0395	.4503	.8745
MEN75	16.6700	33.3951	.1839	.8794
MEN76	16.7300	32.2395	.3936	.8748
MEN77	16.5400	32.4731	.6067	.8720
MEN78	16.6700	32.4860	.3813	.8750
MEN79	16.5400	32.4731	.6067	.8720
MEN80	16.6700	32.2233	.4393	.8737
MEN81	16.6500	32.3914	.4202	.8742
MEN82	16.7500	32.7146	.2895	.8774
MEN83	16.7900	32.3090	.3537	.8759
MEN84	16.7700	32.1385	.3943	.8748
MEN85	16.7900	33.0565	.2122	.8795
MEN86	16.7000	31.3636	.6000	.8698
MEN87	17.3500	33.3813	.2621	.8772
MEN88	16.8200	32.3309	.3407	.8763
MEN89	16.8500	31.5833	.4735	.8728
MEN90	17.3600	34.2933	.0137	.8812
MEN91	16.9700	31.4435	.4857	.8725
MEN92	17.0300	31.9082	.4051	.8747
MEN93	17.1800	30.6339	.7197	.8665
MEN94	17.0400	31.8368	.4198	.8743
MEN95	17.1700	32.2435	.3825	.8751
MEN96	17.0700	31.9243	.4094	.8745
MEN97	17.1500	30.5126	.7213	.8663
MEN98	17.1800	30.6339	.7197	.8665
MEN99	17.4300	33.8233	.2908	.8771
MEN100	17.1500	32.0480	.4121	.8744

α = 0.8780

Appendix B.8.2
Reliability Analyses for **Age 12** (n=100; v=15) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT58	6.7100	11.2383	.2241	.8219
MOT59	6.8300	10.2637	.5048	.8053
MOT60	6.6300	11.2456	.3632	.8159
MOT61	6.7400	10.7196	.4133	.8117
MOT62	6.8800	10.3491	.4410	.8098
MOT63	6.9000	10.8384	.2642	.8226
MOT64	6.9700	10.9587	.2095	.8273
MOT65	7.3600	10.0509	.6416	.7967
MOT66	7.2000	10.0606	.5158	.8043
MOT67	7.2500	10.2096	.4855	.8066
MOT68	7.4000	10.7475	.4015	.8124
MOT69	7.3500	10.1692	.5805	.8006
MOT70	7.1800	10.3511	.4098	.8124
MOT71	7.3100	10.2363	.5152	.8046
MOT72	7.2700	9.8355	.6357	.7955

α = 0.8205

Appendix B.8.3
Reliability Analyses for **Age 12** (n=100; v=45) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN71	24.1800	58.6945	.2120	.8862
MEN72	24.1300	58.0334	.4059	.8840
MEN73	24.1900	57.8322	.3606	.8843
MEN74	24.1000	58.2121	.4373	.8839
MEN75	24.2400	58.1034	.2753	.8855
MEN76	24.3000	57.5657	.3285	.8848
MEN77	24.1100	57.5736	.5658	.8826
MEN78	24.2400	57.9014	.3082	.8850
MEN79	24.1100	57.5736	.5658	.8826
MEN80	24.2400	57.2954	.4076	.8835
MEN81	24.2200	57.6683	.3616	.8842
MEN82	24.3200	57.9370	.2656	.8858
MEN83	24.3600	57.5257	.3125	.8851
MEN84	24.3400	57.1762	.3694	.8841
MEN85	24.3600	58.3741	.1927	.8871
MEN86	24.2700	56.5627	.5021	.8820
MEN87	24.9200	58.4784	.2935	.8852
MEN88	24.3900	57.5534	.3009	.8853
MEN89	24.4200	56.5087	.4396	.8829
MEN90	24.9300	60.0254	-.0272	.8886
MEN91	24.5400	56.2509	.4625	.8825
MEN92	24.6000	56.9899	.3663	.8842
MEN93	24.7500	55.3005	.6682	.8792
MEN94	24.6100	56.2807	.4652	.8824
MEN95	24.7400	57.5479	.3227	.8849
MEN96	24.6400	56.5964	.4274	.8831
MEN97	24.7200	55.1935	.6630	.8791
MEN98	24.7500	55.3005	.6682	.8792
MEN99	25.0000	59.0505	.3450	.8853
MEN100	24.7200	57.2339	.3610	.8843
MOT58	24.1700	58.2839	.2974	.8851
MOT59	24.2900	57.1979	.3894	.8838
MOT60	24.0900	58.3252	.4408	.8841
MOT61	24.2000	58.1212	.2997	.8851
MOT62	24.3400	57.1560	.3723	.8841
MOT63	24.3600	59.0408	.0998	.8886
MOT64	24.4300	57.1971	.3423	.8846
MOT65	24.8200	57.4218	.3868	.8838
MOT66	24.6600	57.3782	.3231	.8850
MOT67	24.7100	57.5009	.3190	.8850
MOT68	24.8600	58.0004	.3210	.8848
MOT69	24.8100	57.8322	.3132	.8849
MOT70	24.6400	56.9196	.3825	.8839
MOT71	24.7700	57.7951	.2983	.8852
MOT72	24.7300	57.0072	.3982	.8836

α = 0.8865

Appendix B.9.1

Reliability Analyses for **Age 15** (n=100; variables=25) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN87	12.0300	23.4637	.4930	.8199
MEN88	11.7200	25.1733	.1830	.8318
MEN89	11.5700	24.9951	.4096	.8258
MEN90	12.3000	25.2424	.1750	.8319
MEN91	11.7000	25.0404	.2260	.8302
MEN92	11.7300	24.5223	.3366	.8264
MEN93	11.9000	24.2727	.3290	.8269
MEN94	11.9100	23.8201	.4242	.8229
MEN95	11.8200	24.5127	.2970	.8281
MEN96	11.9900	24.3534	.3036	.8281
MEN97	11.9000	24.0707	.3722	.8251
MEN98	12.0000	23.5758	.4678	.8210
MEN99	12.1800	24.2905	.3464	.8261
MEN100	11.9200	23.2663	.5431	.8177
MEN101	11.9400	24.0570	.3689	.8253
MEN102	12.0300	24.1708	.3424	.8264
MEN103	11.9900	23.9696	.3840	.8246
MEN104	12.0100	24.2322	.3288	.8270
MEN105	12.0000	24.0808	.3605	.8257
MEN106	12.1800	22.6541	.7254	.8104
MEN107	12.0600	24.2388	.3305	.8269
MEN108	12.3200	25.1693	.2046	.8308
MEN109	12.1800	23.6642	.4883	.8204
MEN110	12.1700	23.8395	.4438	.8222
MEN111	12.4500	25.1591	.4114	.8265

α = 0.8311

Appendix B.9.2
Reliability Analyses for **Age 15** (n=100; v=17) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT63	6.8300	12.8294	.3021	.8032
MOT64	6.8300	12.9708	.2458	.8060
MOT65	7.2900	12.1676	.3880	.7986
MOT66	7.0300	11.9688	.4632	.7932
MOT67	7.0300	12.5748	.2736	.8064
MOT68	7.0300	12.0698	.4309	.7955
MOT69	7.1300	11.4880	.5892	.7836
MOT70	7.1600	12.2570	.3487	.8016
MOT71	7.1400	12.1620	.3784	.7994
MOT72	7.2300	11.7142	.5174	.7891
MOT73	7.2500	12.0480	.4167	.7966
MOT74	7.5900	12.9312	.3486	.8014
MOT75	7.5900	12.9716	.3285	.8023
MOT76	7.4400	12.1479	.4688	.7932
MOT77	7.3800	12.0562	.4586	.7936
MOT78	7.3200	11.9168	.4760	.7923
MOT79	7.6100	13.0484	.3351	.8024

α = 0.8074

Appendix B.9.3

Reliability Analyses for Age 15 (n=100; y=42) Both Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN87	19.7100	47.6625	.5035	.8459
MEN88	19.4000	50.3838	.1429	.8540
MEN89	19.2500	49.6843	.4568	.8494
MEN90	19.9800	49.7168	.2687	.8515
MEN91	19.3800	50.4804	.1330	.8541
MEN92	19.4100	49.3353	.3177	.8505
MEN93	19.5800	48.7309	.3532	.8497
MEN94	19.5900	49.0120	.3100	.8507
MEN95	19.5000	48.3535	.4338	.8478
MEN96	19.6700	49.4153	.2455	.8523
MEN97	19.5800	48.6905	.3593	.8495
MEN98	19.6800	47.9572	.4586	.8471
MEN99	19.8600	49.3337	.2806	.8514
MEN100	19.6000	48.3030	.4137	.8482
MEN101	19.6200	48.6016	.3668	.8493
MEN102	19.7100	49.2787	.2657	.8518
MEN103	19.6700	48.9506	.3127	.8507
MEN104	19.6900	48.8019	.3344	.8501
MEN105	19.6800	48.6036	.3633	.8494
MEN106	19.8600	47.1923	.6194	.8435
MEN107	19.7400	49.6287	.2168	.8530
MEN108	20.0000	50.0606	.2181	.8524
MEN109	19.8600	48.6873	.3813	.8490
MEN110	19.8500	49.1793	.3016	.8509
MEN111	20.1300	50.4981	.2748	.8519
MOT63	19.3300	49.7991	.2910	.8511
MOT64	19.3300	49.7587	.2991	.8510
MOT65	19.7900	49.8443	.1903	.8536
MOT66	19.5300	48.1708	.4510	.8474
MOT67	19.5300	48.3930	.4166	.8482
MOT68	19.5300	48.6759	.3731	.8492
MOT69	19.6300	47.9728	.4589	.8471
MOT70	19.6600	48.6711	.3538	.8497
MOT71	19.6400	49.1216	.2890	.8513
MOT72	19.7300	49.4718	.2388	.8525
MOT73	19.7500	49.9672	.1687	.8541
MOT74	20.0900	50.1433	.2886	.8514
MOT75	20.0900	50.4464	.2136	.8524
MOT76	19.9400	49.5519	.2756	.8514
MOT77	19.8800	49.0562	.3307	.8502
MOT78	19.8200	48.6541	.3737	.8492
MOT79	20.1100	50.4019	.2565	.8519

α = 0.8534

Appendix B.10.1

Reliability Analyses for **Age 18** (n=100; variables=31) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN97	14.9100	47.6585	.2548	.9194
MEN98	14.9200	47.2057	.3392	.9185
MEN99	15.1400	45.7378	.4623	.9172
MEN100	14.7900	48.4302	.2845	.9191
MEN101	14.7900	48.4302	.2845	.9191
MEN102	14.8100	47.9938	.3571	.9184
MEN103	15.0700	47.3991	.2201	.9208
MEN104	14.8100	47.9938	.3571	.9184
MEN105	15.0300	48.8375	-.0040	.9237
MEN106	15.0700	45.6819	.5000	.9165
MEN107	15.1000	46.3131	.3841	.9183
MEN108	15.1700	45.1324	.5491	.9157
MEN109	15.1500	45.0581	.5667	.9154
MEN110	15.1800	45.5430	.4826	.9169
MEN111	15.2300	43.7142	.7612	.9121
MEN112	15.6800	47.9774	.2377	.9193
MEN113	15.3100	44.5393	.6307	.9144
MEN114	15.3400	45.4792	.4888	.9168
MEN115	15.4200	46.8117	.2997	.9197
MEN116	15.4300	46.5910	.3369	.9191
MEN117	15.4800	45.2218	.5832	.9152
MEN118	15.2600	43.6085	.7756	.9118
MEN119	15.5100	47.5049	.2152	.9206
MEN120	15.4600	43.8469	.8032	.9116
MEN121	15.5800	44.6905	.7894	.9126
MEN122	15.5300	44.2314	.8042	.9120
MEN123	15.5800	44.6905	.7894	.9126
MEN124	15.5800	44.6905	.7894	.9126
MEN125	15.5500	45.1591	.6567	.9142
MEN126	15.6400	45.7681	.6833	.9145
MEN127	15.5800	44.6905	.7894	.9126

α = 0.9190

Appendix B.10.2

Reliability Analyses for **Age 18** (n=100; $\bar{y}$=17) **Motor Items**

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT66	9.4100	9.3959	.4701	.7190
MOT67	9.3900	10.0787	.1775	.7410
MOT68	9.3800	10.1976	.1305	.7441
MOT69	9.4700	9.2819	.4487	.7190
MOT70	9.4200	10.5289	-.0318	.7571
MOT71	9.5200	9.6663	.2624	.7357
MOT72	9.4900	9.3231	.4143	.7218
MOT73	9.5500	9.1591	.4384	.7189
MOT74	9.7100	9.5211	.2657	.7364
MOT75	9.8400	9.4287	.3032	.7325
MOT76	9.6700	9.2536	.3624	.7263
MOT77	9.6100	9.5534	.2707	.7355
MOT78	9.5900	8.9918	.4815	.7141
MOT79	9.9800	9.6158	.2814	.7339
MOT80	10.1100	9.6948	.3578	.7281
MOT81	9.7800	8.7794	.5256	.7086
MOT82	10.0800	9.6299	.3504	.7282

α = 0.7417

Appendix B.10.3
Reliability Analyses for Age 18 (n=100; y=48) Both Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN97	25.1600	65.2469	.3057	.8886
MEN98	25.1700	64.9708	.3441	.8882
MEN99	25.3900	63.5534	.4268	.8869
MEN100	25.0400	66.5034	.2472	.8896
MEN101	25.0400	66.5034	.2472	.8896
MEN102	25.0600	66.0368	.3171	.8889
MEN103	25.3200	65.1895	.2271	.8899
MEN104	25.0600	66.0368	.3171	.8889
MEN105	25.2800	67.1531	-.0356	.8935
MEN106	25.3200	63.7349	.4275	.8869
MEN107	25.3500	64.2904	.3400	.8883
MEN108	25.4200	62.7511	.5252	.8853
MEN109	25.4000	62.8687	.5150	.8855
MEN110	25.4300	63.5203	.4221	.8870
MEN111	25.4800	61.1814	.7221	.8820
MEN112	25.9300	65.9041	.2363	.8894
MEN113	25.5600	62.5923	.5359	.8851
MEN114	25.5900	63.4969	.4220	.8870
MEN115	25.6700	64.4860	.3084	.8888
MEN116	25.6800	64.1794	.3519	.8881
MEN117	25.7300	62.8052	.5641	.8849
MEN118	25.5100	61.0605	.7358	.8817
MEN119	25.7600	65.2347	.2333	.8898
MEN120	25.7100	61.7837	.6967	.8827
MEN121	25.8300	62.4658	.7171	.8833
MEN122	25.7800	62.2945	.6806	.8834
MEN123	25.8300	62.4658	.7171	.8833
MEN124	25.8300	62.4658	.7171	.8833
MEN125	25.8000	62.9091	.6069	.8845
MEN126	25.8900	63.5736	.6313	.8850
MEN127	25.8300	62.4658	.7171	.8833
MOT66	25.1800	64.4117	.4300	.8871
MOT67	25.1600	66.2772	.1218	.8907
MOT68	25.1500	66.0884	.1616	.8902
MOT69	25.2400	65.2347	.2502	.8894
MOT70	25.1900	67.6908	-.1196	.8938
MOT71	25.2900	65.9454	.1305	.8912
MOT72	25.2600	65.2246	.2425	.8896
MOT73	25.3200	65.2299	.2216	.8900
MOT74	25.4800	65.1814	.2050	.8905
MOT75	25.6100	65.8767	.1208	.8918
MOT76	25.4400	65.4812	.1698	.8911
MOT77	25.3800	66.3390	.0660	.8925
MOT78	25.3600	65.2832	.2054	.8904
MOT79	25.7500	64.8965	.2775	.8891
MOT80	25.8800	66.2077	.1341	.8906
MOT81	25.5500	64.6742	.2683	.8895
MOT82	25.8500	65.0177	.3171	.8885

α = 0.8900

Appendix B.11.1

Reliability Analyses for **Age 21** (n=100; variables=29) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN107	16.1600	44.7418	.4726	.9026
MEN108	16.1900	43.8928	.6084	.9006
MEN109	16.1900	43.8928	.6084	.9006
MEN110	16.1900	43.8928	.6084	.9006
MEN111	16.2500	44.3106	.3558	.9030
MEN112	16.8600	44.4044	.2429	.9052
MEN113	16.2800	42.8703	.6259	.8990
MEN114	16.4000	42.4646	.5709	.8994
MEN115	16.3900	43.5130	.3931	.9026
MEN116	16.5200	44.1915	.2432	.9057
MEN117	16.5200	42.4137	.5254	.9001
MEN118	16.5000	42.0505	.5907	.8989
MEN119	16.5500	43.5227	.3436	.9038
MEN120	16.5000	42.9192	.4488	.9017
MEN121	16.5700	42.2678	.5396	.8999
MEN122	16.5300	42.0092	.5887	.8989
MEN123	16.5800	43.1147	.4044	.9026
MEN124	16.5800	43.0137	.4203	.9023
MEN125	16.5900	42.6888	.4707	.9013
MEN126	16.6100	42.4423	.5089	.9005
MEN127	16.6900	41.7514	.6263	.8981
MEN128	16.6300	43.0637	.4109	.9025
MEN129	16.7200	41.9612	.5992	.8987
MEN130	16.8500	43.7045	.3597	.9032
MEN131	16.4600	40.9378	.7980	.8948
MEN132	16.6500	44.5530	.1824	.9069
MEN133	16.7200	42.2642	.5497	.8997
MEN134	16.7400	42.6590	.4910	.9008
MEN135	16.9400	43.0267	.5626	.8998

α = 0.9043

Appendix B.11.2
Reliability Analyses for **Age 21** (n=100; $\bar{y}$=17) **Motor Items**

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT70	8.7300	9.6132	.1857	.7355
MOT71	8.7100	9.4807	.2537	.7295
MOT72	8.6100	9.5938	.3230	.7254
MOT73	8.6200	9.4905	.3610	.7226
MOT74	8.8300	8.8900	.4135	.7143
MOT75	8.8000	9.4343	.2215	.7333
MOT76	8.7100	9.3797	.2969	.7258
MOT77	8.7700	9.2496	.3072	.7250
MOT78	9.1100	8.9676	.3514	.7207
MOT79	8.9900	8.5555	.4925	.7050
MOT80	9.1400	8.9499	.3646	.7193
MOT81	9.0900	8.8504	.3898	.7166
MOT82	9.1600	9.0246	.3432	.7216
MOT83	9.2400	9.0731	.3588	.7200
MOT84	9.1500	8.8157	.4168	.7137
MOT85	9.1400	9.3135	.2353	.7329
MOT86	9.5200	10.2521	.0000	.7387

α = 0.7358

Appendix B.11.3
Reliability Analyses for **Age 21** (n=100; v=46) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN107	25.6800	71.4319	.4959	.8945
MEN108	25.7100	70.4504	.6053	.8931
MEN109	25.7100	70.4504	.6053	.8931
MEN110	25.7100	70.4504	.6053	.8931
MEN111	25.7700	70.9264	.3655	.8947
MEN112	26.3800	71.2885	.2201	.8965
MEN113	25.8000	69.1111	.6325	.8916
MEN114	25.9200	69.0036	.5221	.8924
MEN115	25.9100	70.0019	.3912	.8942
MEN116	26.0400	70.5640	.2799	.8959
MEN117	26.0400	68.4226	.5471	.8919
MEN118	26.0200	68.7471	.5113	.8925
MEN119	26.0700	70.6920	.2608	.8962
MEN120	26.0200	69.2521	.4473	.8934
MEN121	26.0900	68.7292	.4997	.8926
MEN122	26.0500	68.5530	.5283	.8922
MEN123	26.1000	69.6061	.3906	.8943
MEN124	26.1000	69.8687	.3585	.8948
MEN125	26.1100	68.9878	.4659	.8931
MEN126	26.1300	68.4577	.5306	.8921
MEN127	26.2100	68.2282	.5652	.8916
MEN128	26.1500	69.4419	.4093	.8940
MEN129	26.2400	68.2246	.5723	.8915
MEN130	26.3700	70.5385	.3181	.8952
MEN131	25.9800	67.3127	.7146	.8895
MEN132	26.1700	71.5163	.1596	.8977
MEN133	26.2400	68.7095	.5108	.8925
MEN134	26.2600	69.1640	.4584	.8933
MEN135	26.4600	69.3418	.5646	.8923
MOT70	25.8500	72.7753	.0256	.8987
MOT71	25.8300	71.6779	.1930	.8966
MOT72	25.7300	71.2698	.3643	.8949
MOT73	25.7400	71.2246	.3549	.8949
MOT74	25.9500	70.2096	.3461	.8949
MOT75	25.9200	70.7410	.2868	.8956
MOT76	25.8300	71.7385	.1838	.8967
MOT77	25.8900	71.2706	.2261	.8964
MOT78	26.2300	70.2395	.3184	.8953
MOT79	26.1100	69.8969	.3545	.8948
MOT80	26.2600	70.2549	.3214	.8953
MOT81	26.2100	70.8140	.2460	.8964
MOT82	26.2800	70.9511	.2384	.8964
MOT83	26.3600	71.3842	.2011	.8968
MOT84	26.2700	70.6637	.2724	.8960
MOT85	26.2600	70.6388	.2738	.8960
MOT86	26.6400	73.1216	.0000	.8969

α = 0.8965

Appendix B.12.1

Reliability Analyses for **Age 24** (n=100; variables=36) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN113	19.3000	64.1111	.0000	.9238
MEN114	19.4200	61.6198	.4651	.9213
MEN115	19.4800	61.8683	.3447	.9224
MEN116	19.4700	62.7365	.2060	.9238
MEN117	19.5500	60.5732	.4943	.9208
MEN118	19.5500	61.1793	.4028	.9219
MEN119	19.5800	62.5289	.1932	.9245
MEN120	19.5900	61.1534	.3855	.9222
MEN121	19.5800	60.8521	.4340	.9216
MEN122	19.4700	61.0597	.4930	.9209
MEN123	19.5400	62.3317	.2354	.9238
MEN124	19.5400	60.9378	.4460	.9214
MEN125	19.6000	60.0808	.5348	.9203
MEN126	19.6100	59.9373	.5499	.9201
MEN127	19.6400	60.0913	.5139	.9206
MEN128	19.6400	60.2933	.4857	.9210
MEN129	19.6900	60.2969	.4695	.9212
MEN130	19.7800	59.9511	.5026	.9208
MEN131	19.3800	61.8137	.5185	.9211
MEN132	19.6200	62.3390	.2097	.9244
MEN133	19.6400	59.8085	.5535	.9201
MEN134	19.6900	59.3272	.6017	.9194
MEN135	19.8100	57.9130	.7775	.9170
MEN136	19.7300	60.0173	.4989	.9208
MEN137	19.8600	59.6570	.5457	.9202
MEN138	19.8900	61.3514	.3248	.9231
MEN139	19.8800	60.1067	.4886	.9210
MEN140	19.9000	60.1919	.4813	.9210
MEN141	20.0700	59.0153	.7566	.9178
MEN142	20.2300	62.1183	.4767	.9215
MEN143	20.0700	59.0153	.7566	.9178
MEN144	19.9800	58.2420	.7895	.9170
MEN145	20.1400	60.0206	.6927	.9189
MEN146	20.1500	60.2096	.6774	.9191
MEN147	20.1600	60.3984	.6625	.9194
MEN148	20.2700	63.2092	.3201	.9227

α = 0.9230

Appendix B.12.2

Reliability Analyses for **Age 24** (n=100; v=19) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT75	9.2100	14.5312	.2012	.7751
MOT76	9.1500	14.7551	.1599	.7767
MOT77	9.1600	14.7014	.1725	.7761
MOT78	9.2500	14.1490	.3015	.7690
MOT79	9.3000	13.3636	.5190	.7537
MOT80	9.4200	13.3976	.4662	.7569
MOT81	9.3300	14.0011	.3131	.7684
MOT82	9.4800	13.6057	.4007	.7619
MOT83	9.5200	13.9087	.3162	.7683
MOT84	9.4500	13.9672	.3005	.7695
MOT85	9.4600	14.0893	.2662	.7721
MOT86	9.6600	13.6610	.4176	.7609
MOT87	9.5000	14.0303	.2818	.7709
MOT88	9.6300	14.1142	.2749	.7711
MOT89	9.5700	13.6617	.3915	.7626
MOT90	9.4300	13.6213	.4000	.7620
MOT91	9.7400	13.4671	.5281	.7539
MOT92	9.7400	14.0327	.3439	.7662
MOT93	9.8200	13.8461	.4822	.7587

α = 0.7757

Appendix B.12.3
Reliability Analyses for **Age 24** (n=100; v=55) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN113	29.2900	108.9555	.0000	.9193
MEN114	29.4100	105.8807	.4416	.9174
MEN115	29.4700	106.3122	.3132	.9183
MEN116	29.4600	106.6752	.2741	.9185
MEN117	29.5400	104.9580	.4271	.9174
MEN118	29.5400	105.3216	.3856	.9177
MEN119	29.5700	107.2173	.1642	.9196
MEN120	29.5800	105.0945	.3907	.9177
MEN121	29.5700	105.0153	.4040	.9175
MEN122	29.4600	105.5640	.4188	.9175
MEN123	29.5300	106.5142	.2547	.9188
MEN124	29.5300	104.6153	.4733	.9170
MEN125	29.5900	104.1231	.4915	.9168
MEN126	29.6000	103.5152	.5523	.9162
MEN127	29.6300	104.2557	.4601	.9170
MEN128	29.6300	104.6395	.4198	.9174
MEN129	29.6800	104.1794	.4533	.9171
MEN130	29.7700	104.3809	.4213	.9174
MEN131	29.3700	105.9728	.5181	.9172
MEN132	29.6100	106.5231	.2286	.9191
MEN133	29.6300	103.8314	.5047	.9166
MEN134	29.6800	103.0683	.5673	.9160
MEN135	29.8000	101.2121	.7410	.9142
MEN136	29.7200	103.7996	.4841	.9168
MEN137	29.8500	103.8460	.4780	.9169
MEN138	29.8800	105.1572	.3506	.9181
MEN139	29.8700	103.2860	.5379	.9163
MEN140	29.8900	104.3817	.4305	.9173
MEN141	30.0600	102.6226	.7181	.9149
MEN142	30.2200	106.4562	.4599	.9176
MEN143	30.0600	102.6226	.7181	.9149
MEN144	29.9700	101.6254	.7522	.9143
MEN145	30.1300	103.6496	.6891	.9155
MEN146	30.1400	103.9802	.6622	.9158
MEN147	30.1500	104.2298	.6466	.9160
MEN148	30.2600	107.7701	.3247	.9185
MOT75	29.5100	106.1918	.3019	.9184
MOT76	29.4500	107.0177	.2364	.9188
MOT77	29.4600	107.7459	.1361	.9195
MOT78	29.5500	106.4722	.2516	.9188
MOT79	29.6000	104.8081	.4131	.9175
MOT80	29.7200	105.3956	.3242	.9183
MOT81	29.6300	105.9324	.2853	.9186
MOT82	29.7800	104.8198	.3775	.9178
MOT83	29.8200	106.4117	.2215	.9193
MOT84	29.7500	105.8662	.2754	.9188
MOT85	29.7600	105.8610	.2754	.9188
MOT86	29.9600	105.3721	.3463	.9181

MOT87	29.8000	105.4545	.3148	.9184
MOT88	29.9300	106.3688	.2366	.9191
MOT89	29.8700	104.7405	.3909	.9177
MOT90	29.7300	106.7041	.1943	.9196
MOT91	30.0400	106.1802	.2883	.9185
MOT92	30.0400	106.2206	.2838	.9186
MOT93	30.1200	106.4703	.3007	.9183

α = 0.9190

Appendix B.13.1

Reliability Analyses for **Age 27** (n=100; variables=32) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN123	17.7500	62.7348	.1122	.9342
MEN124	17.7700	61.1082	.3944	.9319
MEN125	17.7500	61.0581	.4312	.9315
MEN126	17.8300	59.7991	.5502	.9303
MEN127	17.8100	60.8221	.4020	.9318
MEN128	17.8300	60.1829	.4880	.9310
MEN129	17.9000	59.7677	.4986	.9309
MEN130	17.9000	59.8283	.4896	.9310
MEN131	17.6300	63.1243	.1987	.9332
MEN132	17.8400	61.9741	.1987	.9340
MEN133	17.8200	59.6844	.5802	.9300
MEN134	17.8400	61.0448	.3431	.9325
MEN135	17.8700	58.5183	.7123	.9284
MEN136	17.9900	58.7171	.6048	.9296
MEN137	17.9600	59.0287	.5734	.9300
MEN138	17.9900	60.3938	.3740	.9325
MEN139	18.0200	60.0198	.4179	.9320
MEN140	17.9800	60.0804	.4195	.9319
MEN141	18.0800	56.9228	.8304	.9266
MEN142	18.4800	60.1511	.5874	.9301
MEN143	18.1600	60.4590	.3518	.9329
MEN144	18.0700	58.9142	.5584	.9302
MEN145	18.2900	57.5817	.7871	.9273
MEN146	18.3100	57.7514	.7760	.9275
MEN147	18.2600	60.0125	.4288	.9318
MEN148	18.3400	60.0448	.4578	.9313
MEN149	18.2200	57.1632	.8119	.9269
MEN150	18.1000	56.8990	.8315	.9266
MEN151	18.2300	59.1890	.5331	.9305
MEN152	18.3600	58.2529	.7434	.9280
MEN153	18.3600	58.2529	.7434	.9280
MEN154	18.4800	60.1511	.5874	.9301

α = 0.9325

Appendix B.13.2
Reliability Analyses for **Age 27** (n=100; v=19) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT78	11.6900	15.1049	.2922	.7880
MOT79	11.7800	14.3552	.4521	.7791
MOT80	11.8800	13.9248	.4966	.7749
MOT81	11.7600	14.8105	.3059	.7867
MOT82	11.8700	14.0536	.4628	.7771
MOT83	11.9200	14.3572	.3392	.7847
MOT84	11.8800	14.2885	.3812	.7821
MOT85	11.9400	14.6226	.2540	.7903
MOT86	11.9200	13.8319	.4989	.7743
MOT87	11.9300	14.4092	.3196	.7860
MOT88	11.9900	14.2524	.3453	.7845
MOT89	11.9100	14.6484	.2569	.7899
MOT90	12.0200	14.4642	.2794	.7890
MOT91	12.1200	14.6117	.2314	.7924
MOT92	12.1200	14.3087	.3135	.7868
MOT93	12.1400	13.2529	.6149	.7651
MOT94	12.1000	14.3737	.2961	.7880
MOT95	11.9700	13.9890	.4279	.7789
MOT96	12.2200	14.0723	.3894	.7815

α = 0.7923

Appendix B.13.3
Reliability Analyses for **Age 27** (n=100; y=51) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN123	30.3700	102.4173	.1589	.9213
MEN124	30.3900	101.1292	.3271	.9202
MEN125	30.3700	100.6799	.4164	.9196
MEN126	30.4500	99.2803	.5113	.9187
MEN127	30.4300	100.5304	.3709	.9199
MEN128	30.4500	99.4217	.4936	.9189
MEN129	30.5200	98.7168	.5239	.9185
MEN130	30.5200	99.6865	.4138	.9195
MEN131	30.2500	103.1793	.2113	.9210
MEN132	30.4600	101.6044	.2193	.9211
MEN133	30.4400	98.9560	.5628	.9184
MEN134	30.4600	100.6549	.3340	.9202
MEN135	30.4900	97.3837	.7038	.9170
MEN136	30.6100	97.9171	.5692	.9180
MEN137	30.5800	98.4885	.5189	.9185
MEN138	30.6100	99.0888	.4445	.9193
MEN139	30.6400	98.8186	.4656	.9190
MEN140	30.6000	99.0505	.4515	.9192
MEN141	30.7000	95.6465	.7881	.9158
MEN142	31.1000	99.8485	.5235	.9189
MEN143	30.7800	100.0925	.3268	.9204
MEN144	30.6900	98.5191	.4886	.9188
MEN145	30.9100	97.0322	.6834	.9170
MEN146	30.9300	97.3789	.6566	.9173
MEN147	30.8800	99.4602	.4080	.9196
MEN148	30.9600	99.4327	.4425	.9193
MEN149	30.8400	96.3984	.7217	.9165
MEN150	30.7200	95.7996	.7698	.9160
MEN151	30.8500	98.8763	.4618	.9191
MEN152	30.9800	97.6360	.6644	.9173
MEN153	30.9800	97.6360	.6644	.9173
MEN154	31.1000	99.8485	.5235	.9189
MOT78	30.3100	102.4181	.2186	.9208
MOT79	30.4000	101.1919	.3090	.9203
MOT80	30.5000	100.7374	.3036	.9205
MOT81	30.3800	103.1875	.0437	.9221
MOT82	30.4900	100.8989	.2894	.9206
MOT83	30.5400	101.6448	.1897	.9216
MOT84	30.5000	101.1414	.2575	.9209
MOT85	30.5600	101.6832	.1814	.9217
MOT86	30.5400	100.3317	.3332	.9203
MOT87	30.5500	101.2601	.2290	.9212
MOT88	30.6100	99.4726	.4040	.9196
MOT89	30.5300	100.0900	.3639	.9200
MOT90	30.6400	102.1115	.1271	.9223
MOT91	30.7400	99.9923	.3357	.9203
MOT92	30.7400	99.7903	.3562	.9201
MOT93	30.7600	98.9923	.4378	.9193

MOT94	30.7200	100.3046	.3044	.9206
MOT95	30.5900	100.6080	.2892	.9207
MOT96	30.8400	100.9034	.2500	.9211

α = 0.9210

Appendix B.14.1

Reliability Analyses for **Age 30** (n=100; variables=28) **Mental Items**

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN131	15.2400	30.9721	.2550	.8633
MEN132	15.1800	31.1794	.2886	.8628
MEN133	15.2300	30.9466	.2744	.8629
MEN134	15.2100	31.1373	.2448	.8634
MEN135	15.2900	30.7938	.2552	.8635
MEN136	15.3100	30.3171	.3531	.8612
MEN137	15.3700	29.8920	.4044	.8598
MEN138	15.3400	31.0549	.1675	.8660
MEN139	15.3800	30.0360	.3674	.8608
MEN140	15.3800	30.1572	.3416	.8616
MEN141	15.5300	29.7062	.3814	.8606
MEN142	15.5200	29.7673	.3715	.8609
MEN143	15.5400	30.0287	.3184	.8626
MEN144	15.4300	30.7526	.2011	.8657
MEN145	15.5200	29.3430	.4537	.8584
MEN146	15.5500	27.5833	.7988	.8471
MEN147	15.6200	29.5511	.4030	.8600
MEN148	15.6700	29.5567	.4045	.8599
MEN149	15.6900	29.5292	.4122	.8597
MEN150	15.7100	30.2484	.2783	.8638
MEN151	15.6200	29.8945	.3382	.8620
MEN152	15.7300	29.8759	.3526	.8615
MEN153	15.6300	27.4678	.8137	.8464
MEN154	15.7100	27.6423	.7925	.8473
MEN155	15.8400	30.0752	.3489	.8614
MEN156	16.0400	30.4832	.4810	.8594
MEN157	15.9200	29.0036	.6560	.8534
MEN158	16.0400	30.4832	.4810	.8594

α = 0.8643

Appendix B.14.2
Reliability Analyses for **Age 30** (n=100; v=18) **Motor Items**

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT84	9.7600	9.2549	.1727	.6564
MOT85	9.7500	9.4419	.0939	.6637
MOT86	9.7800	9.2844	.1463	.6592
MOT87	9.7700	9.5324	.0441	.6690
MOT88	9.8500	8.8157	.2990	.6426
MOT89	9.9000	8.9798	.2122	.6530
MOT90	9.8300	9.2940	.1182	.6631
MOT91	9.9900	8.4544	.3799	.6311
MOT92	10.1100	9.0282	.1647	.6600
MOT93	10.0500	8.7753	.2540	.6481
MOT94	9.8800	8.9754	.2215	.6518
MOT95	10.2200	8.5976	.3294	.6380
MOT96	10.0700	8.3284	.4137	.6260
MOT97	10.1100	8.8868	.2132	.6535
MOT98	10.2000	8.1818	.4805	.6170
MOT99	10.3000	8.6970	.3198	.6397
MOT100	10.2200	8.2945	.4432	.6225
MOT101	10.4100	9.2948	.1362	.6604

α = 0.6611

Appendix B.14.3
Reliability Analyses for **Age 30** (n=100; y=46) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN131	25.8400	58.8832	.2663	.8682
MEN132	25.7800	59.0218	.3398	.8677
MEN133	25.8300	59.1324	.2261	.8687
MEN134	25.8100	59.3272	.2065	.8689
MEN135	25.8900	57.9575	.3871	.8663
MEN136	25.9100	57.9211	.3746	.8665
MEN137	25.9700	57.6860	.3705	.8664
MEN138	25.9400	59.1075	.1631	.8699
MEN139	25.9800	57.8582	.3388	.8670
MEN140	25.9800	57.7774	.3511	.8668
MEN141	26.1300	57.0031	.4123	.8656
MEN142	26.1200	57.4804	.3485	.8668
MEN143	26.1400	58.0408	.2696	.8684
MEN144	26.0300	58.3122	.2531	.8686
MEN145	26.1200	57.1168	.3985	.8658
MEN146	26.1500	54.5934	.7458	.8587
MEN147	26.2200	57.2238	.3747	.8663
MEN148	26.2700	57.5324	.3352	.8671
MEN149	26.2900	57.0161	.4074	.8657
MEN150	26.3100	57.8322	.2990	.8678
MEN151	26.2200	57.2642	.3692	.8664
MEN152	26.3300	57.4355	.3565	.8667
MEN153	26.2300	54.4415	.7595	.8583
MEN154	26.3100	54.7211	.7328	.8590
MEN155	26.4400	57.7640	.3436	.8669
MEN156	26.6400	58.3741	.4504	.8663
MEN157	26.5200	56.6764	.5761	.8632
MEN158	26.6400	58.3741	.4504	.8663
MOT84	25.8800	58.6521	.2723	.8681
MOT85	25.8700	59.9728	.0402	.8714
MOT86	25.9000	58.9798	.2017	.8692
MOT87	25.8900	59.7959	.0662	.8712
MOT88	25.9700	58.7769	.2036	.8693
MOT89	26.0200	57.9794	.3042	.8676
MOT90	25.9500	59.3409	.1235	.8706
MOT91	26.1100	57.3918	.3625	.8665
MOT92	26.2300	58.1183	.2551	.8687
MOT93	26.1700	57.9809	.2750	.8683
MOT94	26.0000	59.0505	.1544	.8703
MOT95	26.3400	57.9438	.2886	.8680
MOT96	26.1900	57.6908	.3127	.8676
MOT97	26.2300	58.4819	.2070	.8697
MOT98	26.3200	56.9269	.4247	.8653
MOT99	26.4200	57.7814	.3330	.8671
MOT100	26.3400	57.3378	.3721	.8664
MOT101	26.5300	59.2213	.1562	.8699

α = 0.8696

Appendix B.15.1

Reliability Analyses for **Age 36** (n=100; variables=29) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN140	15.1600	40.2974	.3090	.8859
MEN141	15.3400	38.9337	.3536	.8844
MEN142	15.4500	38.8965	.3030	.8857
MEN143	15.3300	38.7890	.3919	.8837
MEN144	15.1700	40.0617	.3585	.8853
MEN145	15.3500	38.4722	.4390	.8827
MEN146	15.4100	38.0019	.4850	.8817
MEN147	15.4500	38.2702	.4143	.8832
MEN148	15.5700	38.1062	.4095	.8834
MEN149	15.4200	39.0945	.2784	.8861
MEN150	15.3400	38.9539	.3494	.8845
MEN151	15.5500	37.6843	.4845	.8816
MEN152	15.4900	38.4544	.3675	.8843
MEN153	15.6100	37.8565	.4473	.8825
MEN154	15.6200	38.2784	.3764	.8842
MEN155	15.6000	37.0505	.5851	.8791
MEN156	15.6800	37.6339	.4856	.8816
MEN157	15.7100	37.3191	.5432	.8802
MEN158	15.7500	38.6136	.3308	.8852
MEN159	15.5100	37.4847	.5300	.8805
MEN160	15.7700	38.6031	.3368	.8851
MEN161	15.7400	38.4368	.3587	.8846
MEN162	15.7000	35.7071	.8240	.8731
MEN163	15.7800	38.6784	.3263	.8853
MEN164	15.9200	38.2360	.4777	.8819
MEN165	15.9100	36.9514	.7271	.8767
MEN166	15.8200	36.1289	.8021	.8742
MEN167	15.9300	38.1668	.5011	.8815
MEN168	15.8400	40.1964	.0789	.8905

α = 0.8864

Appendix B.15.2
Reliability Analyses for **Age 36** (n=100; y=21) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT91	9.3400	14.5095	.0922	.7537
MOT92	9.3800	13.9147	.2634	.7425
MOT93	9.4100	13.8201	.2794	.7415
MOT94	9.4200	14.0844	.1964	.7476
MOT95	9.3800	13.8137	.2952	.7403
MOT96	9.4100	14.2241	.1579	.7503
MOT97	9.4700	13.1203	.4680	.7266
MOT98	9.6000	13.6768	.2818	.7416
MOT99	9.5700	14.4900	.0618	.7589
MOT100	9.5900	13.4363	.3501	.7360
MOT101	9.6200	13.6723	.2827	.7415
MOT102	9.6900	13.4080	.3622	.7350
MOT103	9.7400	13.3863	.3785	.7337
MOT104	9.7000	13.6465	.2955	.7404
MOT105	9.9100	13.5171	.4288	.7313
MOT106	9.6400	13.1014	.4462	.7279
MOT107	9.7400	12.9620	.5054	.7233
MOT108	9.7000	13.3030	.3942	.7324
MOT109	10.1200	14.9754	.0000	.7508
MOT110	9.9400	13.7337	.3818	.7350
MOT111	10.0300	14.0294	.4006	.7367

α = 0.7490

Appendix B.15.3
Reliability Analyses for **Age 36** (n=100; y=50) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN140	25.2800	80.9511	.3236	.8926
MEN141	25.4600	78.9378	.3767	.8912
MEN142	25.5700	79.4395	.2576	.8927
MEN143	25.4500	78.9369	.3851	.8911
MEN144	25.2900	80.6726	.3534	.8923
MEN145	25.4700	78.8173	.3860	.8911
MEN146	25.5300	78.0698	.4466	.8903
MEN147	25.5700	78.1264	.4196	.8906
MEN148	25.6900	78.4787	.3476	.8916
MEN149	25.5400	78.9580	.3278	.8918
MEN150	25.4600	79.2206	.3365	.8917
MEN151	25.6700	77.5971	.4534	.8901
MEN152	25.6100	78.4827	.3624	.8913
MEN153	25.7300	77.8153	.4207	.8905
MEN154	25.7400	78.0327	.3952	.8909
MEN155	25.7200	77.0319	.5126	.8892
MEN156	25.8000	77.5758	.4492	.8901
MEN157	25.8300	77.0516	.5141	.8892
MEN158	25.8700	78.1951	.3870	.8910
MEN159	25.6300	77.3062	.4979	.8894
MEN160	25.8900	78.8464	.3143	.8920
MEN161	25.8600	78.7479	.3204	.8919
MEN162	25.8200	74.8360	.7769	.8853
MEN163	25.9000	78.6566	.3390	.8917
MEN164	26.0400	78.2206	.4612	.8902
MEN165	26.0300	76.8375	.6438	.8879
MEN166	25.9400	75.5317	.7410	.8861
MEN167	26.0500	78.0682	.4914	.8898
MEN168	25.9600	80.6853	.1079	.8947
MOT91	25.4800	80.5552	.1421	.8940
MOT92	25.5200	78.4945	.3970	.8909
MOT93	25.5500	79.6641	.2356	.8930
MOT94	25.5600	80.1277	.1759	.8938
MOT95	25.5200	80.0703	.1934	.8935
MOT96	25.5500	80.3914	.1456	.8941
MOT97	25.6100	78.4019	.3721	.8912
MOT98	25.7400	77.9317	.4068	.8907
MOT99	25.7100	79.8847	.1852	.8939
MOT100	25.7300	79.2900	.2517	.8929
MOT101	25.7600	79.1943	.2620	.8928
MOT102	25.8300	79.1324	.2723	.8926
MOT103	25.8800	79.3188	.2570	.8928
MOT104	25.8400	78.6206	.3324	.8918
MOT105	26.0500	78.1692	.4771	.8900
MOT106	25.7800	78.6986	.3187	.8920
MOT107	25.8800	78.1875	.3900	.8910
MOT108	25.8400	79.1257	.2741	.8926
MOT109	26.2600	81.7903	.0000	.8937

MOT110	26.0800	79.2461	.3484	.8915
MOT111	26.1700	79.6981	.3913	.8914

α = 0.8933

Appendix B.16.1

Reliability Analyses for **Age 42** (n=100; variables=33) **Mental** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN146	19.3200	47.6137	.5131	.8919
MEN147	19.2300	48.3405	.5684	.8924
MEN148	19.2800	47.1733	.6972	.8899
MEN149	19.3000	48.7778	.2948	.8949
MEN150	19.2700	48.7041	.3538	.8942
MEN151	19.2700	47.3506	.6850	.8903
MEN152	19.3700	47.5284	.4680	.8923
MEN153	19.3600	47.6873	.4483	.8927
MEN154	19.3900	48.5029	.2772	.8954
MEN155	19.5200	46.2521	.5831	.8900
MEN156	19.5300	46.6759	.5121	.8913
MEN157	19.4600	46.6549	.5491	.8907
MEN158	19.5200	46.8582	.4870	.8918
MEN159	19.4400	47.0974	.4878	.8919
MEN160	19.5200	48.5552	.2244	.8967
MEN161	19.6600	47.4590	.3716	.8941
MEN162	19.3600	45.9701	.7778	.8874
MEN163	19.6800	47.7754	.3248	.8950
MEN164	19.6800	46.2400	.5549	.8904
MEN165	19.6200	48.0562	.2853	.8958
MEN166	19.5200	45.1208	.7660	.8864
MEN167	19.7600	47.1741	.4220	.8931
MEN168	19.8100	47.8928	.3233	.8949
MEN169	19.6700	48.2031	.2620	.8962
MEN170	19.6400	47.7075	.3355	.8948
MEN171	19.7300	47.4112	.3819	.8939
MEN172	19.6100	47.1898	.4151	.8932
MEN173	19.6600	47.5600	.3567	.8944
MEN174	19.7700	47.0476	.4433	.8927
MEN175	19.8400	47.1863	.4427	.8927
MEN176	19.8500	47.5025	.3964	.8935
MEN177	19.8600	47.7378	.3628	.8941
MEN178	19.9400	48.4004	.2897	.8952

α = 0.8958

Appendix B.16.2

Reliability Analyses for **Age 42** (n=100; y=16) **Motor** Items

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MOT96	9.3500	8.7955	.2882	.6992
MOT97	9.3700	8.8213	.2590	.7018
MOT98	9.3800	8.6824	.3121	.6967
MOT99	9.3700	8.7405	.2949	.6984
MOT100	9.3800	8.9451	.1983	.7077
MOT101	9.4500	8.7753	.2304	.7052
MOT102	9.4600	8.4731	.3451	.6927
MOT103	9.4400	8.3095	.4248	.6841
MOT104	9.5500	8.4924	.3025	.6976
MOT105	9.7900	8.6322	.2468	.7043
MOT106	9.5500	8.7146	.2211	.7071
MOT107	9.5200	8.5147	.3030	.6975
MOT108	9.6000	8.2424	.3844	.6877
MOT109	9.6800	8.2804	.3632	.6903
MOT110	9.8200	8.2097	.4127	.6844
MOT111	9.9900	8.7373	.2963	.6983

α = 0.7107

Appendix B.16.3
Reliability Analyses for **Age 42** (n=100; v=49) **Both** Item Sets

Item	Scale $\bar{X}$ if Item Deleted	Scale Var if Item Deleted	Corrected Item-Total Correlation	alpha if Item Deleted
MEN146	29.5000	80.5354	.5222	.8986
MEN147	29.4100	81.7999	.5028	.8996
MEN148	29.4600	80.3721	.6308	.8980
MEN149	29.4800	82.1309	.2910	.9008
MEN150	29.4500	82.0480	.3458	.9004
MEN151	29.4500	80.6338	.6100	.8983
MEN152	29.5500	80.3712	.4849	.8988
MEN153	29.5400	80.9580	.4108	.8996
MEN154	29.5700	81.8233	.2697	.9011
MEN155	29.7000	79.1616	.5435	.8978
MEN156	29.7100	79.8039	.4631	.8988
MEN157	29.6400	79.2832	.5586	.8977
MEN158	29.7000	79.7071	.4779	.8986
MEN159	29.6200	79.8945	.4932	.8985
MEN160	29.7000	81.5253	.2625	.9014
MEN161	29.8400	80.7822	.3314	.9005
MEN162	29.5400	78.6954	.7401	.8961
MEN163	29.8600	80.5055	.3627	.9001
MEN164	29.8600	78.7479	.5638	.8974
MEN165	29.8000	81.1515	.2915	.9011
MEN166	29.7000	77.6061	.7331	.8953
MEN167	29.9400	79.9560	.4330	.8992
MEN168	29.9900	80.9393	.3290	.9005
MEN169	29.8500	81.7652	.2212	.9020
MEN170	29.8200	80.8764	.3214	.9007
MEN171	29.9100	80.2645	.3931	.8997
MEN172	29.7900	80.0060	.4228	.8993
MEN173	29.8400	80.6812	.3428	.9004
MEN174	29.9500	80.0884	.4195	.8994
MEN175	30.0200	80.1006	.4379	.8991
MEN176	30.0300	80.5748	.3841	.8998
MEN177	30.0400	80.5640	.3892	.8997
MEN178	30.1200	81.4400	.3156	.9006
MOT96	29.5200	80.7572	.4610	.8991
MOT97	29.5400	82.1095	.2467	.9013
MOT98	29.5500	82.5328	.1825	.9020
MOT99	29.5400	81.1600	.3818	.8999
MOT100	29.5500	82.4924	.1881	.9019
MOT101	29.6200	82.2380	.1966	.9020
MOT102	29.6300	82.2961	.1866	.9021
MOT103	29.6100	81.3918	.3070	.9007
MOT104	29.7200	79.8804	.4510	.8990
MOT105	29.9600	80.9277	.3242	.9006
MOT106	29.7200	82.3046	.1690	.9026
MOT107	29.6900	82.0342	.2049	.9021
MOT108	29.7700	81.0880	.3015	.9009
MOT109	29.8500	80.4924	.3641	.9001
MOT110	29.9900	81.1211	.3077	.9008
MOT111	30.1600	81.4893	.3348	.9004

α = 0.9017